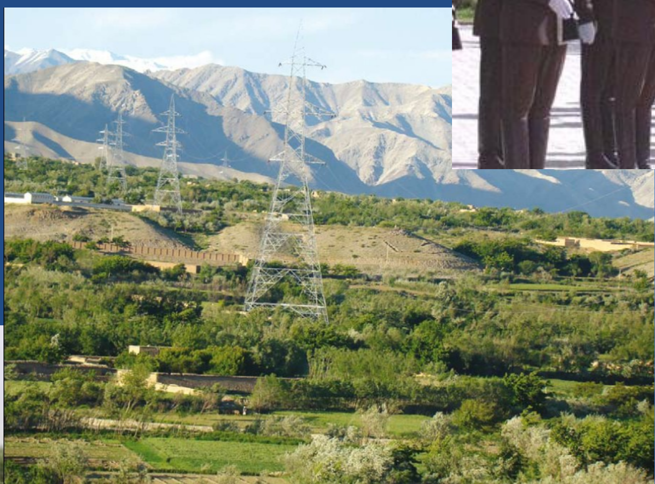
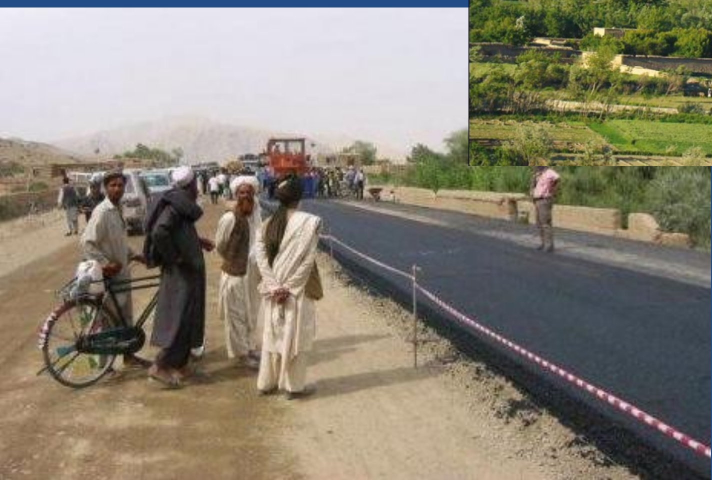
Reconnecting India and Central Asia

Emerging Security and Economic Dimensions





Nirmala Joshi
Editor

Central Asia- Caucasus Institute
Silk Road Studies Program

Reconnecting India and Central Asia

Emerging Security and Economic Dimensions

Nirmala Joshi, Editor

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Regional Economic Linkages

Gulshan Sachdeva

India is making a successful transition from an excessively inward-oriented economy to a more globally integrated one. As a result of new policies in the early 1990s, it has become one of the fastest growing economies of the world. Despite some serious challenges such as energy security, poverty, infrastructure, regional disparities and internal security, there are strong indications that rapid growth will continue. Although major world economies were in recession in 2008, the Indian economy continued on a growth course. But due to increasing global linkages, the growth rate came down from the average 8.8 percent achieved in the five years from 2003 to 2008. Despite adverse global conditions, India was able to achieve 7 percent growth even for the year 2008-09. With exports of $163 billion, Indian's merchantable trade reached $414 billion in 2007-08, having grown at an average annual rate of more than 30 percent in the four years from 2004 to 2008. In addition, the service sector, which accounts for about 55 percent of the Indian economy, continues to perform well and contribute to growing exports that reached $142 billion in 2007-08. Within the service sector, Information Technology and Business Process Outsourcing (IT-BPO) industries have been growing at an average of 31 percent in 2004-08. In 2007-08, this sector alone was responsible for $40 billion worth of exports of IT and related services.[1]

Apart from its expansion, the Indian economy has also diversified significantly during the last decade. India's trade relations with the US and the European Union (EU) have increased in absolute terms. However, as a percentage of India's total trade, trade with the EU and the US has declined in the last decade. In comparison, there has been rapid integration of the Indian economy with Asia, which has been reinforced by India's *Look East* policy that was initiated in the early 1990s. This is clearly evident from the figures

[1] Figures used are taken from various publications of the Ministry of Finance and Ministry of Commerce & Industry, Government of India.

of India-China trade (with an average growth rate of 53 percent per year in 2004-08), as well as trade between India and the ASEAN (Association of South Asian Nations) states. Studies have shown that India's qualitative and quantitative engagement with the Asian economies is far deeper than commonly perceived.[2] India's economic linkages with the countries of the Middle East have traditionally been quite strong, and more so now due to energy imports, the activities of the 2.5 million-strong Indian diaspora, and good trade relations.

It is becoming clear that India, along with China and Japan, will be playing an important role in the evolving Asian economic architecture. However, India will not be effective if its economic relations with Pakistan and the Greater Central Asian (GCA) region remain marginal. While there are many definitions of Wider or Greater Central Asia,[3] for the present purposes GCA includes the five former Soviet Central Asian republics and Afghanistan. In this case, India needs to work for an economic policy framework in which Pakistan, Afghanistan and the Central Asian republics also view the partnership as beneficial. This policy framework will also improve India's energy security as it may finally gain it access to energy resources in Greater Central Asia. It can also fundamentally change India's sea-based continental trade. Simultaneously, it can generate tremendous opportunities of trade and transit for Pakistan, Afghanistan and Central Asia itself. Indians can find significant investment opportunities in GCA, which in turn can transform their small and medium-sized industries, as well as agriculture. The growing realization of these opportunities has influenced policy makers not only in India, but also in Pakistan and Afghanistan.

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[2] See *India's Economic Integration with Asia,* A speech by Mr Jairam Ramesh, the then Minister of State for Commerce and Power, Government of India at seminar series on Regional Economic Integration, Asian Development Bank, Manila, 24 November 2008; Mukul G Asher, *India's Rising Role in Asia*, Discussion Paper No. 121, (New Delhi: RIS, 2007).

[3] See William Byrd, Martin Raiser et al., *Economic Cooperation in the Wider Central Asian Region*, World bank Working Paper No. 75 (Washington DC: The World Bank, 2006); S. Frederick Starr, ' A *Greater Central Asia Partnership for Afghanistan and Its Neighbors'*, (Washington, D.C.: Central Asia-Caucasus Institute & Silk Road Studies Program, 2005).

Many developments have provided enough inputs to Indian policy makers to shape their newly emerging 'Look-West' policy. These include Afghanistan's membership in the South Asian Association for Regional Cooperation (SAARC), signing of South Asian Free Trade Area (SAFTA), Regional Economic Cooperation Conferences (RECC) on Afghanistan, the emerging India-Kazakhstan partnership,[4] and continuous interest in the Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline, as well as the Iran-Pakistan-India (IPI) pipeline. Since the inclusion of Central and South Asia under a newly formed bureau in the U.S. State Department, linking these two regions has also been a declared U.S. foreign policy objective.[5] This fits well with the emerging India-U.S. ties and adds a new dimension to India-Central Asia relations.

Economic Development in the Greater Central Asian Region

In GCA and India, major changes in the economic policy environment have been taking place since the early 1990s. The process of economic liberalization that began in India in 1991 coincided with the start of economic reforms in Central Asia. As a result of these reforms, India's growth rate has increased. The Central Asian economies, however, are still in the process of economic and political transformation, moving forward at varying paces. Despite a very complex legacy that includes central planning, the dissolution of the USSR, distorted economic structures, and ethnic and boundary problems, these countries have made significant progress in market reforms, while progress on democratic reforms has been below expectations. Due to their natural resource, strategic location, political systems, and the backgrounds of the political elite, the regional states used both standard as well as non-conventional strategies of economic transformation.

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[4] For increasing India-Kazakhstan linkages, see P Stobdan, 'India and Kazakhstan Should Share Complementary Objectives', *Strategic Analysis*, Vol. 33, No. 1, 2009.

[5] US officials have articulated this view very clearly on many occasions. During a testimony on Central Asia to the House Committee on Foreign Affairs, US Assistant Secretary for South & Central Asia Richard Boucher argued that "it is in the interest of the Central Asian states to build linkages to the south that complement their existing ties to the north, east and west. Our goal is to help them revive ancient ties between South and Central Asia and to help create new links in the areas of trade, transport, democracy, energy and communications." See http://kazakhstan.usembassy.gov/boucher040808.html

In the early years, the breakup of the Soviet Union affected the region unfavorably. Trade and transit were interrupted by new borders, increased transportation costs, and the collapse of traditional markets. Industrial and agricultural production were hurt by a host of factors, including the disruption in access to inputs and markets and the loss of subsidies for budgets, enterprises and households that were received during the Soviet period either directly or indirectly through social payments and below-market prices on transport and energy. Moreover, to collapse of the Soviet administration damaged administrative structures, while the region lost skilled labor when many Russians departed. Access to secure water and energy resources was also curtailed, with substantial implications for agriculture, industry and household requirements. The countries in the region were left with large environmental burdens (including the Aral Sea ecological disaster, as well as industrial, nuclear and biological waste). Above all, there arose ethnic tensions and even, in Tajikistan, civil war.[6]

In the 1990s, the Central Asian regimes tried to discover their national economic models within their complex identities. These models arose from their sense of belonging to Asia, Eurasia, Europe and the third world. Having long been part of a Eurasian power, national elites continued to identify more with Europe than Asia. However, the deficit in market reforms and democratic processes pushed them to search for solutions within their Asian surroundings. Despite their economic linkages with Europe, the regimes tried to learn lessons from the Chinese model of development, as well as from the East and Southeast Asian miracle economies. In the second half of the 1990s, this helped them to avoid many unnecessary costs of transition that many multilateral organizations considered the necessary costs of systemic transformation from a centrally planned economy to a market economy.

After a period of negative growth, the economies started growing fast from 2000 onward (see Table 1). This growth came about due to high commodity prices, rebound in investment activity, growth in domestic consumption and pickup in remittances. The momentum of growth gave the countries' leaders the confidence needed to push for much-needed economic reforms. As a re-

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[6] See Johannes Linn, 'Central Asia: Ten Years of Transition', Talking points for Central Asia Donors' Consultation Meeting, Berlin, Germany, March 1, 2002.

sult of this combination of factors, economic growth in the region has been among the fastest in the world since the late 1990s. Despite security and governance problems, economic growth has been good even in Afghanistan; and according to official statistics, growth in Turkmenistan has also been very high. Both the EBRD and ADB data, which are very similar, reveal high economic growth in the entire region for the period between 2000 and 2008. Moreover, the impact of the global recession on Central Asia has been relatively benign.[7] As a result, economies in the region are expected to grow significantly in 2009 and 2010. Evaluating different scenarios, an ADB study[8] has predicted further that economic prosperity will be significantly enhanced if the region embraces policy reforms, regional cooperation and industrial competitiveness.

Table 1: GDP Growth in Greater Central Asia 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*	2010*
Afghanistan					8.0	16.1	8.2	12.1	3.4	15.7	8.5
Kazakhstan	9.8	13.5	9.8	9.3	9.6	9.7	10.7	8.9	3.3	-1.0	2.5
Kyrgyz Rep.	5.4	5.3	0.0	7.0	7.0	-0.2	3.1	8.5	7.6	1.0	2.0
Tajikistan	8.3	10.2	9.1	10.2	10.6	6.7	7.0	7.8	7.9	0.5	2.0
Turkmenistan	18.6	20.4	15.8	17.1	14.7	13.0	11.4	11.6	9.8	8.0	10.0
Uzbekistan	4.0	4.5	4.2	4.4	7.7	7.0	7.2	9.5	9.0	7.0	6.5

*ADB projections
Sources: EBRD Database for the years 2000-2006, Data for the years 2007-2010 are from *Asian Development Outlook 2009 Update* (Manila: ADB,2009), p. 170.

The success of market-oriented structural and institutional reforms has resulted in mixed progress in the region. According to the different methodologies that major multilateral organizations have developed to measure the progress of reform in transition economies, Kazakhstan and Kyrgyzstan progressed faster in the initial years; Tajikistan and Uzbekistan have also em-

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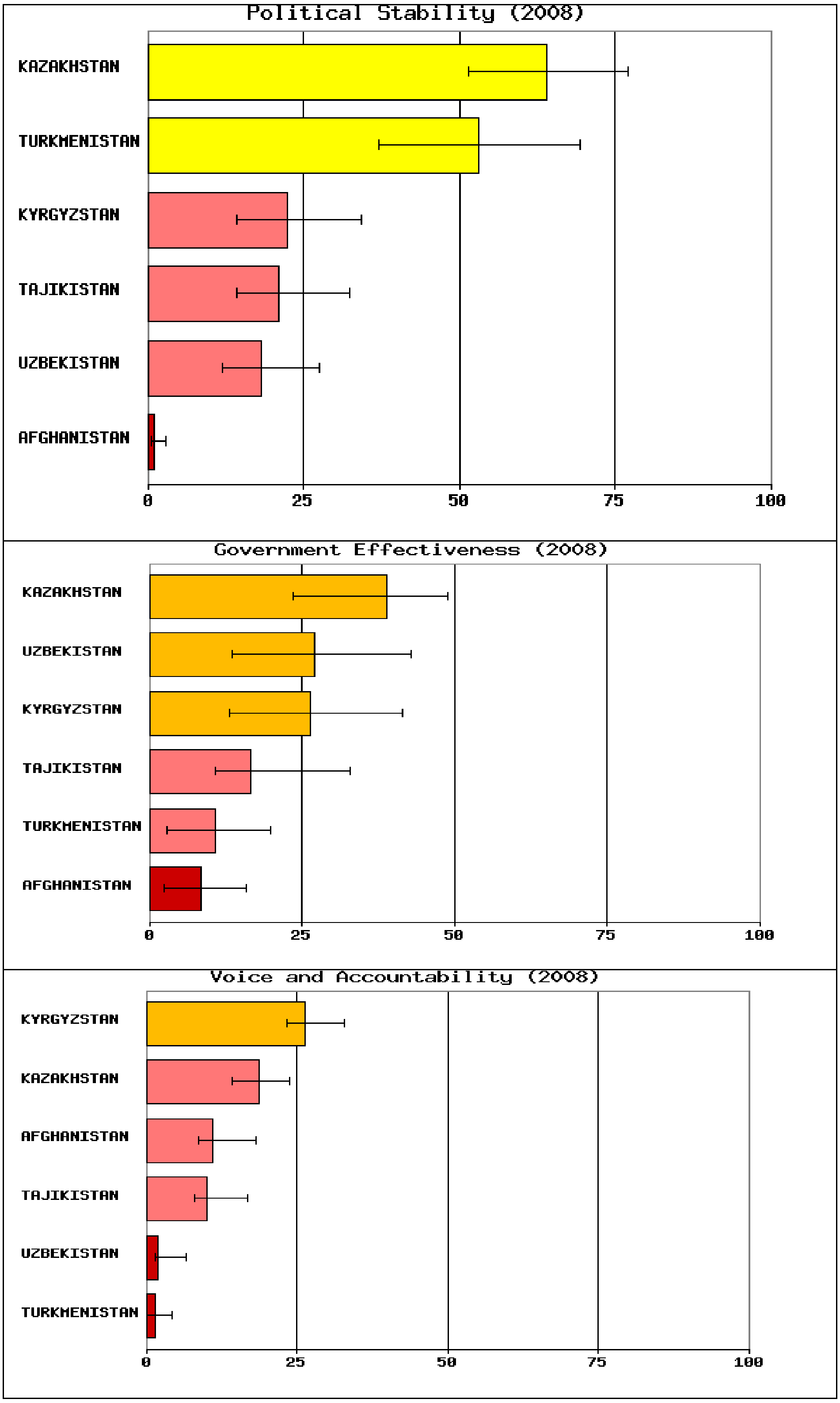
[7] Richard Pomfret, *Central Asia & Global Economic Crisis*, EUCAM Policy brief No. 7, June 2007, http://www.eucentralasia.eu/index.php?id=37

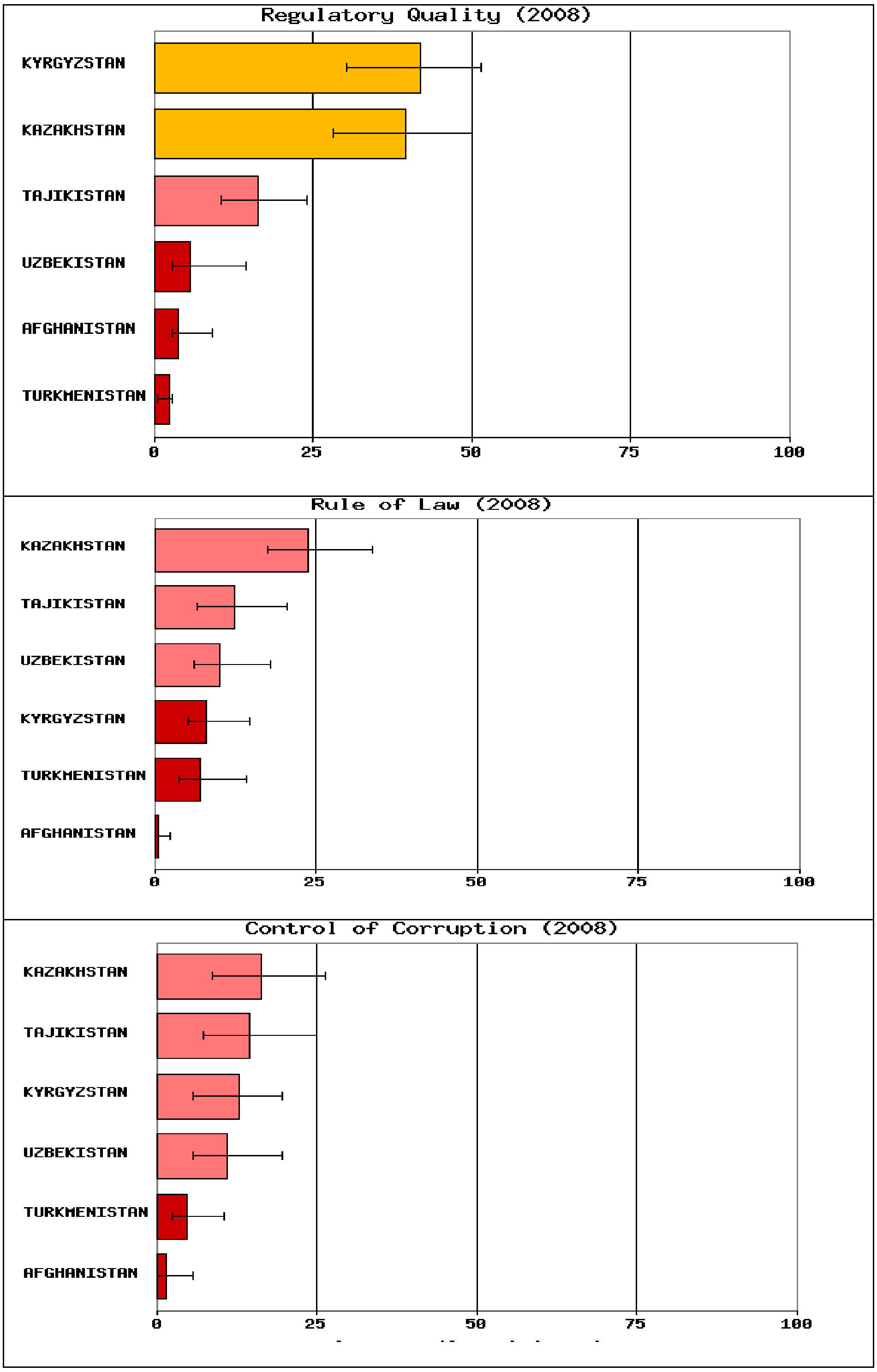
[8] Malcolm Dawling & Ganeshan Wignraja, *Central Asia: Mapping Future Prospects to 2015*, ERD Working Paper No. 80, (Manila, ADB, 2006).

barked on reforms in recent years; whereas only limited reforms have taken place in post-Niyazov Turkmenistan. According to widely used indicators developed by the European Bank for Reconstruction and Development (EBRD), the level of reforms concerning prices, foreign exchange and external trade, privatization, and the banking sector is high in Kazakhstan and the Kyrgyz Republic. Tajikistan and Uzbekistan have also made significant progress in price reforms, external sector reforms and small-scale privatization. The level of reforms in Turkmenistan is low, particularly in the financial sector.

Kazakhstan, Kyrgyzstan and Tajikistan have full current account convertibility and liberalized interest rates. Except Turkmenistan, where the fixed exchange rate system still prevails, all others have broadly adopted managed float system for fixing exchange rates. Kazakhstan and Uzbekistan have some controls on inward FDI. Tajikistan, Turkmenistan and Uzbekistan still maintain wage controls. Land is tradable, with the exclusion of foreigners, in Kazakhstan and Kyrgyzstan. The business environment and competition have also improved significantly in these two economies (See Tables A2 and A3 in Appendix). The World Bank governance indicators for the region show some improvement over the years. These six dimensions of governance combine data on a large number of enterprises and citizens, and are based also on surveys conducted by institutes, think-tanks and international organizations. The latest 2008 indicators show that in political stability, government effectiveness rule of law and control of corruption, Kazakhstan tops the list in the region. Regulatory quality and accountability is better in Kyrgyzstan. Tajikistan has also done well in controlling corruption. As expected, Afghanistan is at the bottom in most governance indicators (Figure 1).

Fig 1: World Bank Governance Indicators for GCA, 2008, (0 worst and 100 best)





Source: D Kaufmann, A Kraay and M Mastruzzi, Governance Matters VIII, Governance Indicators 1996-2008, The World Bank, 2009.

The Relevance of Central Asian Energy for India

Shortly before the global economy went into recession, the U.S. Energy Information Administration (EIA) projected that global energy consumption will increase by 50 percent from 2005 to 2030. It was evident that emerging economies are going to account for much of this projected growth. Among the emerging economies, the highest demand was expected to occur in Asia, particularly in China and India. Despite slowdowns in 2008, the economic projections remain high in the medium to long run. During this period, fossil fuels (oil, natural gas, and coal) will continue to supply much of the energy, with oil maintaining its importance.

Despite fairly low per capita energy consumption, India is the world's fifth largest energy consumer and is likely to become the third largest by 2030. Primary commercial energy demand grew almost threefold at an annual rate of 6 percent between 1981 and 2001. To catch up with the rest of dynamic Asia and to eradicate poverty, it will be essential for India to continue growing at about 8-10 percent or more over the next 25 years. The energy requirements for such sustained annual growth pose a major challenge. According to the government's integrated energy policy, India needs to increase its primary energy supply by a factor of three or four, its electricity generation capacity/supply by a factor of five to six compared to its 2004 levels. With 2003-04 as the base, India's commercial energy supply would need to grow from 5.2 percent to 6.1 percent per annum while its total primary energy supply would need to grow at 4.3 percent to 5.1 percent annually. By 2030, power generation capacity must increase to nearly 800,000 MW from the current capacity of around 160,000 MW. Similarly, the requirement of coal will need to expand to over 2 billion tons per year.

The importance of oil for India can be seen from the fact that in 2006 oil accounted for 36 per cent of the country's primary energy mix.[9] Since India is relatively poor in oil and gas resources, it has to depend on imports to meet its energy needs. With already more than 70 per cent of its crude oil requirements met by imports, India's oil import bill was close to US$90 billion in 2008-09. IEO has shown that even with the reference case projection (5.8 percent annual growth rate), Indian energy consumption between 2005 and 2030

[9] *The Oil and Gas Sector Overview in India 2009* (KPMG India: 2009).

will grow at an average annual rate of 3 percent (see Table 2). Compared to this projection, the Indian economy has grown at an average of 9 % in the last three years (2005-08).

Table 2: Total Energy Consumption in India, 1990-2030 (Quadrillion Btu)

	History			Projections					
	1990	2004	2005	2010	2015	2020	2025	2030	Average Annual % Change, 2005-2030
Reference case Projections *	7.9	15.5	16.2	19.4	23.2	26.2	29.9	33.2	2.9
High Economic Growth Projections	7.9	15.5	16.2	19.7	24.1	28.2	32.2	36.4	3.3
Low Economic Growth Projections	7.9	15.5	16.2	19.1	22.3	25.2	27.8	30.3	2.5
High Price Projections	7.9	15.5	16.2	19.2	22.5	25.2	28.3	30.9	2.6
Low Price projections	7.9	15.5	16.2	19.3	23.5	27.3	30.6	34.0	3.0

* Average annual change 5.8%

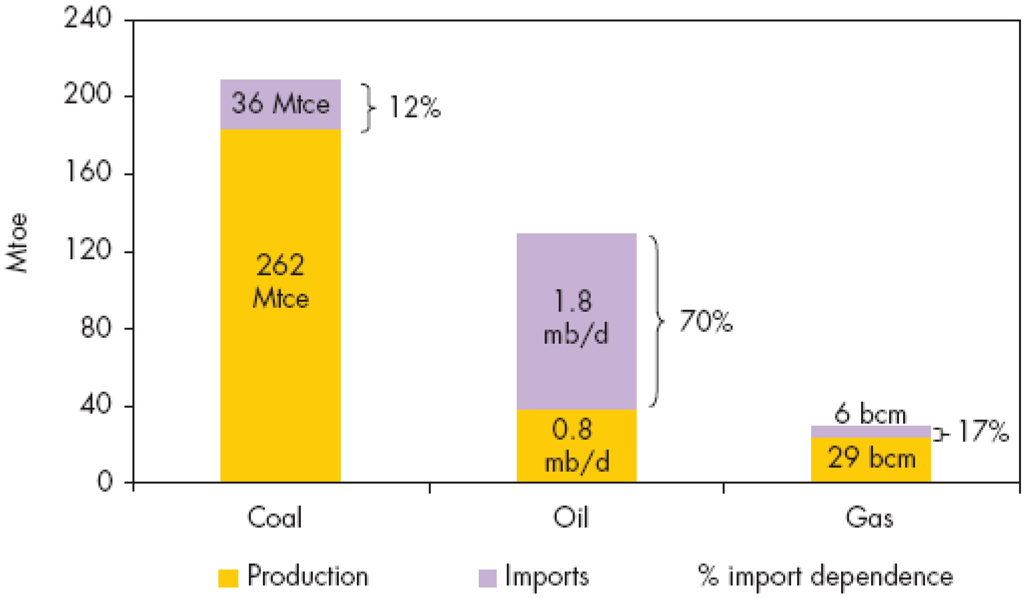
Source: *International Energy Outlook 2008* (Energy Information Administration, US Department of Energy, Washington DC, 2008).

As a result of growing demand, India's energy-import dependence is also growing. In 2005, India imported about 70 percent of its crude oil requirements and consumed about 3 percent of world oil supply. LNG imports started only in 2004 and in 2005 it made up

17 percent of total gas supply. India also imported about 12 percent of its coal supply.[10]

[10] For details see *Energy Outlook 2007* (Paris, IEA/ OECD, 2007).

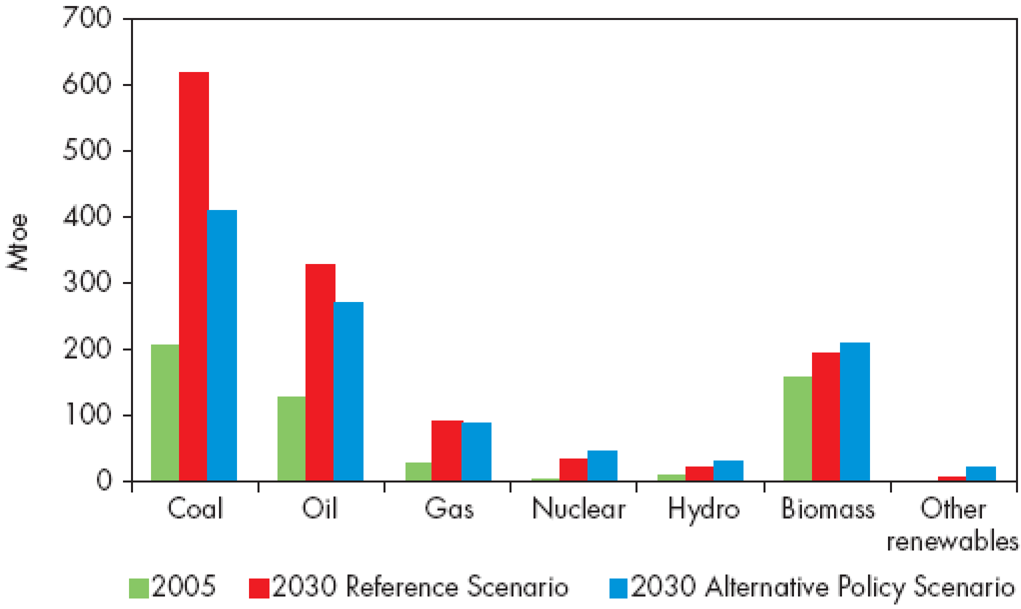
Fig 2: India's Fossil Fuel Production and Imports, 2005



Source: *Energy Outlook 2007* (Paris, IEA/ OECD, 2007).

The Indian economy relies heavily on coal, which accounted for 39 percent of the total primary energy demand in 2005. Coal accounts for about 70 percent of electricity generation. After China and the U.S., India is the world's third-largest coal consumer. As a result of the government policy of diversifying the energy mix, the share of natural gas has increased to 5 percent of the total. Other sources such as wind, solar, and nuclear power, still account for very small shares. Although coal will still be a very important source of energy, the government's alternative policy scenario envisions a reduction in demand by 2030. In this alternative scenario, demand for coal will grow much slower and oil demand will also decrease somewhat due to the introduction of compressed natural gas and greater fuel efficiency. Similarly, the role of nuclear power grow more than is indicated in the reference scenario. But even if all these changes are implemented, India's oil import dependence may still go up to 90 percent by 2030. In addition, gas imports will also have to be increased (Figure 3).

Fig 3: India's Energy Demand: Reference and Alternative Scenarios



Source: *Energy Outlook 2007* (Paris, IEA/ OECD, 2007).

Currently, India imports oil from about 25 countries of which nearly two-thirds of imports come from four countries – Saudi Arabia, Nigeria, Kuwait and Iran (Table 3).

Due to this dependence, policy makers are worried about oil price volatility and its impact on inflation, economic growth, and foreign exchange reserves. It is believed that India's energy security can be increased by (a) diversifying both its energy mix and its sources of energy imports; (b) seriously perusing overseas acquisitions of energy assets; and (c) initiating policy reforms to attract foreign investment as well as improving domestic production, distribution and consumption. In the last few years, energy diplomacy has also become one of the main agendas of the country's foreign and security policy. India is seriously pursuing the nuclear energy option, as well as sources beyond the Middle East. The Indo-U.S. nuclear agreement, as well as consistent engagements with the countries of Eurasia, Africa and Latin America, should be seen in this perspective.

Table 3: Sources of India's Oil Imports 2004-2005

Middle East			**Other Regions**		
Country	**Oil Imports (mmt)**	**% of Total imports**	**Country**	**Oil Imports (mmt)**	**% of Total imports**
Iran	9.61	10.03	Angola	2.44	2.55
Iraq	8.33	8.69	Brazil	0.29	0.30
Kuwait	11.46	11.85	Brunei	0.81	0.84
Neutral Zone	0.15	0.15	Cameroon	0.35	0.36
Oman	0.14	0.14	Congo	0.14	0.14
Qatar	1.19	1.24	Egypt	2.12	2.21
Saudi Arabia	23.93	24.96	Equator	0.15	0.16
UAE	6.43	6.71	Equatorial Guinea	1.66	1.73
Yemen	3.51	3.66	Gabon	0.28	0.29
			Libya	1.47	1.53
			Malaysia	3.43	3.58
			Mexico	2.28	2.38
			Nigeria	15.08	15.73
			Russia	0.16	0.16
			Sudan	0.33	0.34
			Thailand	0.27	0.28
Sub Total	**64.64**	**67.43**	**Sub Total**	**31.23**	**32.57**

Source: *Draft Report of the Energy Committee on Integrated Energy Policy* (New Delhi: Planning Commission, 2005), p. 63.

In this scenario, the new energy sources of GCA are going to play an important role in Indian energy strategy in the coming years. In the early 1990s there was frequent discussion about the Central Asian region becoming another Middle East. Since then such scenarios have become relatively more sober. However, the Central Asian republics definitely possess 3 to 4 percent of proven global oil and gas reserves. Similarly, production of oil and gas has increased in the last few years (see Tables 4, 5 & 6).

Table 4: Recent Estimates of Proven Reserves of Oil and Natural Gas in Greater Central Asia

	Oil (Billion Barrels)		**Natural Gas** (Trillion Cubic Feet)		
	BP Statistical Review	***Oil & Gas Journal***	***BP Statistical Review***	***CEDIGAZ****	***Oil & Gas Journal***
Country	Year-End 2007	January 1, 2009	Year-End 2007	January 1, 2008	January 1, 2009
Afghanistan	NSR	NSR	NSR	3532	1750
Kazakhstan	39,828	30.000	67,203	67,099	85,000
Kyrgyzstan	NSR	0.040	NSR	NSR	0200
Tajikistan	NSR	0.012	NSR	NSR	0.200
Turkmenistan	0.600	0.600	94216	94644	94,000
Uzbekistan	0.594	0.594	61603	61978	65000
India	5459	5625	37257	37257	37960
World	1237876	1331698	6257780	6315770	6254364

NSR: Not Separately Reported

* Centre International d'Information sur le Gaz Naturel et tous Hydrocarbures Gazeux.

Source: US Energy Information Administration Database

Table 5: Oil Production in Central Asia 1998-2007

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
KAZ	526,90	604,92	725,63	835,97	967,51	1 061,97	1 245,87	1 337,17	1 387,22	1 444,23
KYR	1,73	1,66	2,03	2,01	1,51	1,36	1,36	1,96	1,96	0,96
TAJ	0,50	0,50	0,39	0,33	0,31	0,35	0,25	0,28	0,30	0,28
TUR	126,18	154,26	156,64	167,88	192,57	200,00	213,94	196,65	177,31	180,39
UZB	161,15	147,46	151,92	156,04	153,26	156,00	142,01	125,33	108,41	99,68

(Thousand barrels per day)
Source: US Energy Information Administration Database

Table 6: Dry Natural Gas Production in Central Asia 1998-2007 (Tcf)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
KAZ	0,194	0,162	0,314	0,356	0,463	0,490	0,724	0,935	0,906	0,985
KYR	0,0005	0,0004	0,0005	0,001	0,0004	0,001	0,001	0,001	0,001	0,001
TAJ	0,002	0,002	0,001	0,002	0,001	0,001	0,001	0,001	0,001	0,001
TUR	0,466	0,788	1,642	1,702	1,889	2,087	2,068	2,225	2,232	2,432
UZB	1,935	1,964	1,992	2,228	2,038	2,030	2,114	2,108	2,216	2,302

Source: US Energy Information Administration Database

Changing the region's energy flows from the existing northern routes towards Russia to western, eastern, and southern routes towards Europe and Asia was initially thought to be integral to the developmental goals of Central Asian states. To reduce the region's dependence on Russia, a few massive projects such as the Baku-Tiblisi-Ceyhan oil pipeline were implemented. Since demand in Asia (particularly in China and India) was expected to grow much faster than in Europe, other options were looked upon as economically lucrative, among them an eastward routes to China, southern routes through Iran, or southwest routes via Afghanistan. What has been disconcerting for the regional states is that all routes from the region faced serious financial, political and security constraints.

Kazakhstan could play an important role in diversifying Indian imports. Due to a relatively better economic environment, Kazakhstan is seen by India to posses real potential. Major oil production is expected in the coming decades in Kazakhstan (Table 7). Its onshore and offshore proven hydrocarbon reserves have been estimated at 30 to 40 billion barrels of oil equivalent. It produced about 1.45 million barrels a day of oil in 2007 and is expected to reach 1.9 million barrels a day in 2010, with about 2.9 million barrels by 2020.

Table 7: Oil Production Projections in Kazakhstan, 1990-2030

	History				Projections				
	1990	2004	2005	2010	2015	2020	2025	2030	Average Annual % Change, 2005-2030
Reference case Projections *	0.6	1.3	1.4	1.9	2.6	2.9	3.1	3.6	4.0
High Economic Growth Projections	0.6	1.3	1.4	1.9	2.7	3.1	3.5	4.1	4.6
Low Economic Growth Projections	0.6	1.3	1.4	1.9	2.6	2.8	3.0	3.3	3.7
High Price Projections	0.6	1.3	1.4	1.9	2.5	2.6	2.7	3.0	3.2
Low Price projections	0.6	1.3	1.4	1.9	2.7	3.1	3.5	4.1	4.6

(Million barrels oil equivalent per day)
Source: US Energy Information Administration Database

Indian companies are trying hard to get a strong foothold in the region. The Sakhalin-1 investment in Russia and recent purchase of Imperial energy by India's public sector company ONGC (Oil and Natural Gas Corporation), are efforts in this direction. Competition in the region is fierce, as China is pursuing the same strategy. At the same time, the rapidly growing trade and economic relationship between India and China also compel the two to talk of building partnerships in other areas. Earlier, both declared their intentions of cooperation in oil and gas biddings. India also mooted the idea of Asia-wide regional cooperation in energy, and initiated a dialogue between the principal Asian suppliers (Saudi Arabia, UAE, Kuwait, Iran, Qatar, Oman) and principal Asian buyers (India, China, Japan, Korea). These efforts showed some results when the China National Petroleum Corporation (CNPC) and India's ONGC mounted a successful $573 million joint bid to acquire Petro-Canada's 37 percent stake in the al-Furat oil and gas fields in Syria. They earlier worked as joint operators in Sudan.

India and China may be cooperating in other areas, but when it comes to Central Asian energy, competition is fierce. This was clearly illustrated in late 2005 when China outbid India to acquire PetroKazakhstan, Kazakhstan's third-largest oil producer, with CNPC raising its bid to $4.18 billion. Nevertheless, after trying for many years, India may finally be getting into the energy scene in the region. During the visit of Kazakhstan's president to India in January, 2009, India's ONGC Mittal Energy Limited (OMEL) and KazMunaiGaz (KMG), signed a Heads of Agreement for exploration of oil and gas in the Satpayev Block in the Caspian Sea. OMEL is a joint venture between ONGC Videsh Limted (OVL) and Mittal Investments Sarl. The Satpayev block covers an area of 1,582 square kilometers and is at a water depth of 5-10 m. It is situated in a highly prospective region of the North Caspian Sea and is in close proximity to major fields such as Karazhanbas, Kalamkas, Kashagan and Donga, where significant quantities of oil have been discovered. It has estimated reserves of 1.85 billion barrels. The Indian company will have a 25 percent stake, the remaining 75 percent being with KMG.[11]

As far as gas imports are concerned, both Turkmenistan and Uzbekistan are important. Both have large amounts of proven reserves. In the last fifteen years both have been trying to increase export volumes and diversify export routes. Uzbekistan increased its gas production to 2.3 Tcf/y in 2007 but has concentrated mainly on the domestic sector. The Indian public sector com-

[11] "ONGC Mittal Signs Deal to Take 25 Stake in Kazakh Oilfield," *Times of India*, 24 January 2009, available at http://timesofindia.indiatimes.com/Business/India_Business/ONGC-Mittal_signs_deal_to_take_25_stake_in_Kazakh_oilfield/articleshow/4027031.cms

pany Gas Authority of India (GAIL) has signed an MOU with Uzbekistan's Uzbekneftegaz for oil and gas exploration and production. The GAIL is also setting up a few Liquefied Petroleum Gas (LPG) in western Uzbekistan, mainly for Uzbek consumption.[12] After the troubled times of the 1990s, Turkmen gas production reached 2.2 tcf/y in 2006, making it the second largest producer of gas after Russia in the former Soviet space. The country plans to double its gas production by 2010. According to the latest data, it has proven gas reserves of 100 Tcf. With the discovery of new gas field in Yolotan, proven gas reserves may go up significantly.

In the last 12 years, there has been much discussion on the $7.6 billion TAPI gas pipeline. The project has been marred by uncertainties regarding gas reserves in Turkmenistan, the security situation in Afghanistan, and the strained relations between India and Pakistan. Still, all parties are considering the proposal very seriously. This 1,680 km pipeline would run from the Dauletabad gas field in Turkmenistan to Afghanistan, from where it would run alongside the highway from Herat to Kandahar, and then via Quetta to Multan in Pakistan. The final destination of the pipeline is to be Fazilka in Indian Punjab. India was formally invited to join the project in 2006. They decided to invite India as a full member of the project on 15 February 2006.[13] Earlier, India participated in the talks as an observer, along with the ADB, Turkmenistan, Afghanistan and Pakistan. The ADB has already proposed various structures of the project for attracting investors, contractors and financial institutions. In 2006, Turkmenistan informed the members that an independent firm, De Golyer & McNaughton, had confirmed reserves of over 2.3 trillion cubic meters (tcm) of gas at the Daulatabad field. Additional reserves of about 1.2 tcm re expected after drilling in the adjacent area. The gas production capacity of the field could be increased to about 125 million cubic meter per day (mmcm/d) from the current 80 mmcm/d. Turkmenistan has committed to provide sovereign guarantees for long-term uninterrupted

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[12] Richa Mishra, "GAIL to SET up LPG Plants in Uzbekistan", *BusinessLine*, 2 May 2006, available at http://www.thehindubusinessline.com/2006/05/02/stories/2006050201860300.htm

[13] 'India Invited to Join TAPI Project', *The Hindu*, 17 March 2006.

supplies to Pakistan and India.[14] In May 2006, the Indian government officially approved its participation in the TAPI project and authorized the Ministry of Petroleum & Natural Gas to put up a formal request for joining the project.[15] Afghanistan, India and Pakistan signed a framework agreement to buy gas from Turkmenistan in April 2008.[16] The participating countries then planned to discuss the issues of payments of transit to Afghanistan and Pakistan, taxation structure and consortium issues. Despite many obstacles, an Iran-Pakistan-India gas pipeline is also on the agenda.

Trade Linkages

During Soviet times, Indian economic contacts with the Central Asian republics were all channeled through Moscow. The Soviet Union was India's major trading partner. Since 1953, when the first trade agreement took place, seven long-term agreements were signed between the two countries prior the collapse of the USSR. This bilateral trade was conducted through a specific system of trade and payment, called the Rupee Trade System, based on annual plans. An important feature of the system was payments in non-convertible currencies. In 1990-91 more than 16 percent of Indian exports went to the USSR and about 6 percent of imports came from there. The nature and character of the Indo-Soviet trade and economic relations largely determined India's relations with Central Asia. In the post-USSR period, economic relations with the Central Asian region and other former Soviet republics declined considerably. However, in the last few years there has been an upward trend. Currently, the official two-way annual trade turnover between India and the Greater Central Asia region is about US$ 700 million (with about US$ 500 million of exports). Apart from Afghanistan and Kazakhstan, economic relations with other countries are minimal. This trade is also restricted mainly to traditional items. The main commodities being exported from India are pharmaceuticals, tea, readymade garments, leather goods, jute manufactures, cosmetics, cotton yarn, machinery, machine tools,

[14] 'Delhi Invited to Join TAP Project', *Dawn*, 16 March 2006, available at http://www.dawn.com/2006/03/16/top10.htm

[15] Union Cabinet decision press release May 18, 2006, http://pib.nic.in/release/release.asp?relid=17859&kwd=

[16] 'Basic Accord for Turkmen Gas Project Signed' *The Dawn*, 25 April 2008 http://www.dawn.com/2008/04/25/top1.htm

rice, plastic products, machinery and instruments, electronic goods and chemicals. Imports from Greater Central Asia are restricted to fruits and nuts, raw cotton, iron and steel. Uzbekistan and Kazakhstan also export zinc to India. (For details see Tables A1, A4, A5 and A6 in Appendix).

The Export-Import Bank of India has identified potential export items for this region.[17] These include machinery and transport equipments, chemicals, food products, transport vehicles, agricultural machinery and cement etc.[18]

At present, India's trade with the Greater Central Asia region is rather insignificant (only 0.17 percent of total Indian trade), hence it does not make any sense to use any model. The 'gravity' models of international trade, in which distance heavily influences the destination of trade, have not worked even in

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[17] *CIS Region: A Study of India's Trade and Investment Potential,* Occasional Paper No. 116 (Mumbai: Export Import Bank of India, 2007); *Central Asian Republics, Afghanistan & Pakistan: A Study of India's Trade & Investment Potential,* Working Paper (Mumbai: Export Import Bank of India, 2005).

[18] For Kazakhstan the items include machinery and transport equipment harvesting/construction/ food processing/ telecommunication/ data processing equipments and parts, passenger/public transport vehicles and parts); chemicals and related products; iron & steel products; ores and minerals; petroleum products; food products; tobacco; cement; aluminum; measuring instruments. For Uzbekistan, the potential export items include machinery and equipment (agricultural, horticultural, harvesting machinery and parts/ textile machinery/ insulated wires & cables); transport equipment; iron and steel products; measuring/ checking/ precision instruments; organic & inorganic chemicals; pharmaceuticals; plastics and articles; tea; rice; sugar and sugar confectionary and ceramic products. The list for Turkmenistan would include machinery (piston engines and parts/harvesting, textile weaving/knitting machinery/air, vacuum pumps & compressors); transport equipment (passenger & public transport vehicles/semi-trailer tractors); chemicals and related products; food products and iron & steel products. For Tajikistan, Indian exports could focus on food products (durum wheat/sugar, tea); chemicals and related products (inorganic bases/fluorides/medicaments and antibiotics/soaps and detergents); machinery and transport equipment; iron and steel products; motor car tyres; cotton yarn and fabrics; cement; polished glass and glass articles. Commodities having export potential in the Kyrgyz Republic are chemicals and related products (inorganic acids/medicaments and antibiotics/soaps and detergents/polycarbonates); machinery and equipment (wheeled tractors/construction, mining, mineral working machinery); transport equipment (passenger/public transport vehicles and parts); textiles and garments; wheat; sugar and sugar confectionary; tea. In Afghanistan, the economic situation is changing fast. Nevertheless, the potential export items include machinery and equipment and parts (electrical and non-electrical); transport equipment; iron and steel products; diary produce; tea; sugar and sugar confectionary; cereal preparations; fruit juices; yarn and fabrics; garments; rubber pneumatic tyres, pharmaceutical products; cement, knitted and crocheted fabrics, etc.

the case of South Asia. In the case of India-Central Asian countries, the application of the gravity model is of little use due to data limitations.[19] Even if there is a manifold increase in the trade in the coming years, it will still constitute less than 1 percent of total Indian trade. If all formalities regarding Afghanistan's membership of SAFTA are completed soon, trade could get a further boost. The earlier India-Afghanistan preferential trade agreement signed in 2003 was quite helpful in boosting bilateral trade. In fact, in 2007-08, India was Afghanistan's number one export market.

The Importance of Greater Central Asia (GCA) in India's Continental Trade

Although India's trade with the GCA region appears quite insignificant, its importance should not be seen only within this limited context. With the appropriate framework and foresighted policies, this region has the potential to alter the nature and character of India's continental trade. Thus far, the majority of Indian trade is conducted through sea routes. Border trade with China was halted after the 1962 India-China war. A limited opening has been made with China through the Nathula Pass. Similarly, very little trade occurs over roads with Pakistan, Bangladesh and Myanmar. In the last decade, some positive developments in the area of border trade have taken place. Nonetheless, the policy initiatives were limited to a few border points with small number of commodities exchanged by local communities living on both sides of the borders. These initiatives were in response to stop the large 'unauthorized trade' that was already taking place through these borders. To give a new thrust to border trade, the Union Cabinet gave approval for the Land Ports Authority Bill in July, 2008. In December, 2008, a bill to this effect was introduced in the Indian Parliament. The new Land Ports Authority will oversee the construction, management and maintenance of integrated check posts on land borders, regulate the functioning of various agencies, and coordinate several concerned ministries and departments. The new border check posts will be sanitized zones with dedicated passenger and cargo terminals and facilities such as waiting rooms, restaurants, container yards and

[19] See presentation by Ram Upendra Das, 'Prospects and Constraints for Trade Cooperation between India and Central Asian Republics: Some Issue', [Online web] www.ris.org.in/ramupendradas_cii.pdf

warehouses.[20] These initiatives will go a long way towards promoting India's border trade.

Looking beyond the GCA region, it is clear that India trades a great deal with other CIS countries, Iran, and of course with the European continent. In 2007-08, India's total trade with these countries amounted to about US$ 110 billion (Table 8). In the last three years, India's total trade has been growing at an average of more than 28 percent per year. By comparison, trade with Iran, Pakistan and Afghanistan has grown at a much higher annual average. On the basis of the last three-year averages, it can be predicted that India-Pakistan trade may reach US$ 40 billion by 2015. Similarly, trade with Iran has shown unprecedented growth in the last few years. Due to high growth in Russia and other CIS countries, trade with this region may also show substantial gains in the coming few years. Simple calculations on the basis of past trends show that India's trade with Europe, the CIS plus Iran, Afghanistan and Pakistan would be in the range of US$ 500 to 600 billion in 2014-15 (Table 9). These are quite realistic assessments, as actual trade has in fact surpassed many earlier predictions.[21] In comparison to the prediction of $62 billion trade in 2005, actual trade with the region in that year was about $65 billion. Similarly, for the years 2006-07 and for the year 2008-09, predictions were made for 78 and 98 billion, respectively. Actual trade in these years reached $85 and $108 billion (Table 10). One reason was perhaps that the Indian economy in these three years grew above 9 percent per year, one of the highest rates of growth in recent history. Based on this, one could predict trade with this region in the range of about $600 billion. Even after taking into consideration all the cyclical factors, the earlier prediction of achieving 500 billion by 2015 is very much within reach. If the political economy in the region improves and if as little as 20 percent of this trade is conducted over roads, US$ 100 to 120 billion of Indian trade will pass through this region by 2015.

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[20] 'Bill for Land Ports Authority Introduced in Lok Sabha' http://www.livemint.com/2008/12/18184310/Bill-for-Land-Port-Authority-o.html

[21] Gulshan Sachdeva, 'India' in S. Frederick Starr (Ed), *The New Silk Roads: Transport & Trade in Greater Central Asia* (Washington: Central Asia-Caucasus Institute & Silk Road Studies Program, 2007) pp. 335-82.

Table 8: India's Trade with Greater Central Asian Countries plus Rest of CIS and Europe

	2004-05	2005-06	2006-07	2007-08
EXPORTS				
EU-27	18249	23228	26784	34490
Rest of Europe	1423	1681	2062	2748
5 Central Asian Republics	174	168	191	232
Rest of CIS	920	1079	1285	1505
Afghanistan	165	143	182	249
Iran	1231	1188	1449	1948
Pakistan	521	689	1348	1944
Total Exports	**22683**	**28176**	**33301**	**43116**
IMPORTS				
EU-27	19302	25998	29809	38413
Rest of Europe	6318	7081	10275	13186
5 Central Asian Republics	62	72	143	112
Rest of CIS	1897	2880	3717	3666
Afghanistan	47	58	34	109
Iran	410	702	7622	10915
Pakistan	95	179	323	288
Total	**28131**	**36970**	**51923**	**66689**
TRADE				
EU-27	37551	49226	56593	72903
Rest of Europe	7741	8762	12337	15934

5 central Asian Republics	236	240	334	344
Rest of CIS	2817	3959	5002	5171
Afghanistan	212	201	216	358
Iran	1641	1890	9071	12870
Pakistan	616	868	1671	2232
Total Trade	**50814**	**65146**	**85224**	**109812**
ANNUAL % AGE CHANGE IN TOTAL TRADE				
Total Indian Trade		29.2	23.11	33.11
EU 27		31.09	14.96	28.8
Rest of Europe		13.18	40.80	29.15
5 central Asian Republics		1.81	38.9	2.9
Rest of CIS		31.09	14.96	28.8
Afghanistan		-5.34	7.44	65.74
Iran	38.5	15.18	379.77	41.80
Pakistan	78.77	41.03	92.40	33.53

(Million US$) Source: Directorate General of Foreign Trade, Ministry of Commerce, Government of India.

Table 9: India's Trade Projections up to 2015 with Greater Central Asian Countries plus Rest of CIS and Europe

Country/ Region	2007 - 2008 (actual)	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015
EU-27	**72,903**	91055	113728	142046	177415	221591	276767	**344,574**
Rest of Europe	**15,934**	20347	25983	33180	42370	54106	69093	**88,231**
5 CAR	**344**	394	451	516	591	677	785	**888**
Rest of CIS	**5,171**	6381	7874	9716	11989	14794	18255	**22,526**
Afghanistan	**358**	439	638	782	959	1175	1441	**1,767**
Pakistan*	**2232**	3370	5088	7682	11599	17514	26446	**39933**
Iran*	**12870**	16962	22355	29463	38832	51186	67463	**88916**
Total	**109,812**	138,948	176,117	223,385	283,755	309,857	460,250	**586,885**

(Based on current trends, million US dollars) Due to very high increase in trade in 2006-07, growth for 2004-05 is taken for 3-year averages. Source: Author's calculations based on current data and trends from the Ministry of Commerce, Government of India data sources.

Table 10: Comparison of Earlier Projections with Actual Trade

Year	Earlier Projections Made in 2005	Actual Trade
2005-06	61,977	65,146
2006-07	78,091	85,224
2007-08	98,395	109,805
2008-09	123,977	
2009-10	156,212	
2010-11	196,827	
2011-12	248,002	
2012-13	312,482	
2013-14	393,728	
2014-15	496,098	

(Million Us$) Source: Gulshan Sachdeva, 'India' in S. Frederick Starr (Ed), *The New Silk Roads: Transport & Trade in Greater Central Asia* (Washington: Central Asia-Caucasus Institute & Silk Road Studies Program, 2007) p. & Department of Commerce, Ministry of Commerce & Industry, Government of India.

With Indian continental trade moving through the GCA region, the Pakistani economy is also going to benefit in a major way. Many business people in Pakistan fear that with Indian goods moving to Afghanistan and Central Asia, markets for Pakistani products may be eroded. But Pakistani trade figures show that even without Indian competition, it is not able to export much to Central Asia. In the last couple of years, Pakistan exports to Central Asia have been between US$10 to 15 million per year. It has significant exports only to Afghanistan. A major portion of those exports is unlikely to be affected. In fact, with major infrastructural development and movement of goods and services, both India and Pakistan could become important economic players in Central Asia. However, at the moment the presence of both is insignificant.

Table 11: Pakistan's Trade with the Central Asian Region, 2004-05 to 2007-08

Country	**2004-2005**		**2005-2006**		**2006-2007**		**2007-2008**	
	Exp	Imp	Exp	Imp	Exp	Imp	Ex	Imp
Kazakhstan	9.59	1.05	9.37	1.01	8.03	2.96	8.25	47.60
Kyrgyzstan	1.39	0.40	1.75	0.39	0.76	-	1.73	0.62
Tajikistan	0.79	9.79	1.14	5.05	0.42	2.34	0.17	11.87
Turkmenistan	0. 99	13.52	0.90	6.64	1.01	9.88	1.00	22.39
Uzbekistan	2.81	11.23	2.51	10.71	2.05	23.02	2.79	18.01
Total CA	**15.57**	**35.99**	**15.67**	**23.80**	**12.27**	**38.20**	**13.94**	**100.49**
Afghanistan	747.72	38.99	1063.46	47.53	753.94	76.23	1143.66	90.42
Grand Total	**763.29**	**74.98**	**1079.13**	**71.33**	**766.21**	**114.43**	**1157.60**	**190.91**

(Million US$) Source: Trade Development Authority of Pakistan

Investment Potential

The countries of this region provide good investment opportunities for Indian businesses. This is clearly shown by London-based Indian steel tycoon Laxmi Mittal. He owns a 5.5 million ton capacity steel plant in Kazakhstan employing more than 50,000 people. From there he supplies the Chinese market. To facilitate trade and investment with this region, Indian policy makers in the last decade have created an institutional framework. The Indian government has set up bilateral Inter-Governmental Commissions for trade, economic, scientific and technical cooperation with all the Central Asian countries, which have been meeting on a regular basis. These relations are further institutionalized through joint working groups in various fields, such as IT, Science and Technology, hydrocarbons, military-technical cooperation, etc. The Indian government also extends small lines of credit for the countries in the region to enable Indian exporters to export to these markets without repayment risk. In this scheme, around 15 to 20 percent of the contract value is paid as advance by the importers, the balance contract value is disbursed by the Indian EXIM Bank to the exporters upon the shipment of goods. The recovery of credit extended to the overseas buyer is taken care of by the EXIM Bank, without recourse to the Indian exporter. To promote and facilitate trade, Double Taxation Avoidance Agreements have also been signed.

There have also been improvements in the banking sector. The Punjab National Bank has a full-fledged branch in Kabul and many other Indian banks have inter-banking arrangements with countries in the region. Canara Bank has links with Commercial Bank for Foreign Economic Affairs of Tajikistan, the State Bank of India with Turan-Alem Bank of Kazakhstan, the Commercial Bank of Kyrgyzstan, the National Bank of Tajikistan, the State Bank for Foreign Economic Affairs of Turkmenistan and the National Bank for Foreign Economic Activity of Uzbekistan. In 2003, the Indian Ministry of Commerce launched a *Focus CIS* program. The first phase focused on the five Central Asian countries plus Azerbaijan and Ukraine. Other CIS countries have also been included in the program. The program aims to promote business-to-business linkages, support trade fairs and different promotional meetings and seminars.

India has also signed many agreements with these countries for technical economic cooperation under the International Technical and Economic Cooperation (ITEC). Thus far, thousands of candidates from Central Asia have come to India under the program in such disciplines as diplomacy, banking, finance, trade, management and small industry promotion. The highest number of seats allotted to Central Asia is for Uzbekistan, which sends about 120 candidates every year. Thousands of Afghan citizens have been able to participate in various short- and long- term study and training programs in the last few years. The Federation of Indian Chambers of Commerce and Industry (FICCI) has set up Joint Business Councils with Kazakhstan, Uzbekistan and the Kyrgyz republic. Recently the governor of the West Kazakhstan region invited Indian industry to invest in areas such as extraction of sunflower oil, wheat production, wool, leather, construction of elite housing complexes and five star hotels.[22]

Many Indian business organizations and think-tanks have identified such areas of cooperation as energy, food processing, textiles, tourism, information technology, education, consultancy services, petrochemicals and construction.[23] Another area of major interest to Indian businesses would be to participate in the continuing privatization process in the region. Under an Uzbek privatization program, India's Spentex Industries in 2006 acquired Tashkent-To'yetpa Tekstil, a state-owned spinning company, for $81 million. The transaction comprised the acquisition of two manufacturing facilities at Tashkent and To'yetpa that has an installed capacity of 220,000 spindles and a weaving capacity of 236 air-jet looms. Later, the company also acquired the assets to set up a dyeing facility there. The Vardhaman group is also planning to acquire a textile firm in Uzbekistan. Uzbekistan has announced many incentives in order to attract $300 million from Indian textile companies over the next three years. Uzbekistan and Kazakhstan are heavily marketing a bounty of fiscal sops to Indian textile firms.[24] Some other Indian companies such as Punj Lloyd have also participated in oil pipeline projects in Kazakhstan. With offices in Almaty, Atyrau and Tengiz, Punj Lloyd has completed four engineering and construction projects in Kazakh pipeline building.[25]

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[22] http://www.ficci.com/international/countries/Kazakhstan/kazak.pdf

[23] Ramgopal Agarwala, *Towards Comprehensive Economic Co-operation between India and Central Asian Republics*, Discussion Paper No. 108 (New Delhi: RIS, 2006) [Online web] http://www.ris.org.in//dp108_pap.pdf; *Central Asia and Indian Business: Emerging Trends and Opportunities*, Seminar Proceedings, (New Delhi: Confederation of Indian Industry, May 2003).

[24] 'Central Asian Countries Woo Indian Textile Cos', *Business Line*, 22 January 2007.

[25] For details, see Punj Lloyd company website http://www.punjlloyd.com/sub page.php?opt=&page_cat=2&id=15. The projects included (1) the KAM pipeline project for Petrokazakhstan Kumkol resources at Kyzylorda (construction of 16" X 177 Kms crude oil pipeline from Kumkol to Dhuzaly; (2) Large bore and small bore pipeline at wellhead with metering station for Tengizchevroil / PFD at Tengiz (construction of

If the Central Asian countries are able to reform their land policies, there is a tremendous possibility of investment in the agricultural sector. Investment opportunities can be identified country-wise: for Kazakhstan, it could include oil and gas, power generation and distribution, telecommunication equipments, medical equipment and supplies, agricultural machinery, food processing and packaging, construction and engineering services and mining. In Uzbekistan, the focus could be on energy, IT, mining, food processing and packaging, textile machinery and equipment and tourism infrastructure. For Tajikistan, investment opportunities are identified in mining and related equipment, medical and pharmaceutical supplies, textile machinery, telecommunications, agribusiness and related sectors. In Turkmenistan, potential areas for investment would include the oil and gas industry (exploration, development services and equipment), electrical energy (equipment and services), chemical and mining industry, transportation, communications (equipment and services), environmental technology and services, and the healthcare and medical industry.

Indian Linkages with GCA through Regional Arrangements

In the past, India had adopted a cautious approach to regionalism and was engaged in only a few bilateral/regional initiatives, mainly through Preferential Trade Agreements (PTAs) or through open regionalism. The collapse of the Doha Development Round of WTO negotiations has pushed many countries, including India, to look for alternatives to multilateral negotiations to improve their trade positions. For the last few years, India has put its proposed regional trade agreements on the fast track. It has concluded Comprehensive Economic Cooperation Agreements (CECAs) with many countries. These CECAs cover FTA in goods (zero customs duty regime within a fixed time frame on items covering substantial trade, and a relatively small negative list of sensitive items with none or limited-duty concessions), services, and investment and identified areas of economic cooperation. Such agree-

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410 Kms well connecting Flowlines 2" to 24" and Metering Station); (3) SGP Offsites & Utilities for Tengizchevroil / PFD at Tengiz (construction of pipeline fabrication and errection); and (4) Oil & Gas pipeline project - Kashagan Experimental Program for AGIP KCO (engineering, procurement and construction of export oil & gas pipeline 24" 150 kms).

ments include the South Asian Free Trade Area (SAFTA), the India-ASEAN agreement, the framework agreement for India-Bay of Bengal Initiative for Multisectoral Technical & Economic Cooperation (BIMSTEC) FTA, and FTAs with Thailand and Singapore. India already had FTAs with Sri Lanka and Nepal. The India-EU FTA, as well as India-Japan CECA are likely to be concluded soon. A trade and investment deal is also being negotiated with Gulf Cooperation Council (GCC), Southern Common Market (MERCOSUR), South Korea and Chile. Joint study groups have been set up with Israel, Brazil, South Africa and Russia.

Compared to these broader trends, India's links with the GCA region have been relatively weak, despite the fact the most of the Central Asian republics are members of a wide range of regional initiatives. The objective is to integrate themselves with the global economy despite their constraints, such as small domestic markets, their landlocked location, and distance from major world markets. It is argued that regional cooperation in trade could help the region to liberalize trade policies at low costs, reduce the risks of protectionist measures by trading partners, create new trade and improve social welfare.[26] In the past, however, a variety of factors has made developing regional cooperation involving all the countries in the region difficult. The two larger states, Kazakhstan and Uzbekistan, have competed for the position of regional leader. Moreover, as a manifestation of its declared policy of neutrality, Turkmenistan resisted participating in regional forums. Due to the political and security situation in the country, Afghanistan was not able to become a serious player. The major regional economic cooperation initiatives in the greater Central Asian region are summarized in Table 12.

Detailed analysis of these regional initiatives[27] reveals that these organizations are active in the areas of transport, trade, energy, environment, customs, tourism, water, agriculture, food security, information sharing, and other social and cultural exchanges. In some cases, security issues are also covered. In the beginning of the transition period, mutual trade among Central Asian countries played an important role. Although regional trade has

[26] *Central Asia: Increasing Gains from Trade through Regional Cooperation in Trade Policy, Transport, and Custom Transit*, (ADB, 2006).
[27] See Gulshan Sachdeva, op.cit.

clearly developed in Central Asia, its growth has been uneven at best. In the beginning, they had roughly similar trade policies, but today trade policy regimes vary from very liberal in the Kyrgyz Republic to relatively restrictive in Uzbekistan and Turkmenistan. Despite their common interest in increasing trade, all the countries in the region had trade-restricting policies and practices. There were barriers of tariffs, public policies, procedures and regulations. Some other policy-related constraints to trade included import quotas, export licensing requirements and transport restrictions. There are slow, difficult border procedures, multiple cargo inspections within a single country and prohibitions that prevent vehicles from transporting goods between countries. Other barriers to trade include transit fees and the costs of dealing with corrupt border officials and local police. Trade is further restricted by such practices as requiring importers to register contracts and currency conversion restrictions.

Table 12: Important Regional Economic Initiatives in GCA and India

	CIS	EAEC	CACO	ECO	OIC	CAREC	SCO	CIS-7	SAARC	SPECA	INSTC	CSATTF	AH	TAR	TRACECA
Afghanistan				X	X	X	P		X	X		X	X		
Kazakhstan	X	X	X	X	X	X	X			X	X	P	X	X	X
Kyrgyzstan	X	X	X	X	X	X	X	X		X	X	P	X	X	X
Tajikistan	X	X	X	X	X	X	X	X		X	X	X	X	X	X
Turkmenistan	A			X	X					X		X	X		
Uzbekistan	X	X	X	X	X	X	X	X		X		X	X	X	X
India							O		X		X	P	X	X	

X – Member A – Associate member O - Observer P – participate in meetings

CIS - Commonwealth of Independent states (with Armenia, Azerbaijan Belarus, Georgia, Moldova, Russia, Ukraine).

EAEC - Eurasian Economic Community, ex Customs Union (with Russia and Belarus + Moldova, Ukraine and Armenia observers)

CACO - Central Asian Cooperation Organization (with Russia since May 2004 + Georgia, Turkey and Ukraine Observers), ex Central Asian Economic Community), merged with EAEC in 2006

ECO - Economic Cooperation Organization (with Iran, Pakistan, Turkey and Azerbaijan)

OIC- Organization of Islamic Conference (total 56 members, established in 1971)

CAREC (ADB) - Central Asia Regional Economic Cooperation (with Azerbaijan, Mongolia and Xinjiang Autonomous Region of China and Russia)

SCO - Shanghai Cooperation Organization (with Russia and China + Iran, Mongolia, Pakistan as other observes)

CIS-7 - An International initiative to promote poverty reduction, growth and debt sustainability in seven low-income CIS countries: Armenia, Azerbaijan, Georgia, Kyrgyz Republic, Moldova, Uzbekistan, Tajikistan

SAARC - South Asian Association for Regional Cooperation (with Bangladesh, Bhutan, Pakistan, Nepal, Sri Lanka and Maldives).

SPECA - UN Special Program for the Economies of Central Asia

INSTC - International North South Transport Corridor (with Iran, Russia Belarus, Oman, Armenia, Azerbaijan, Syria, Bulgaria, Ukraine and Turkey)

CSATTF - Central and South Asia Transport and Trade Forum (with Pakistan as member and Iran as observer, China, India Kazakhstan and Kyrgyz Republic also participating in meetings)

AH - Asian Highway, a network of 141000 km covering 32 countries in Asia

TAR - Trans Asian Railway, agreed in 2006 this 81000 km trans-continental rail network could connect 28 nations

TRACECA - Transport Corridor Europe Caucasus Asia with 14 members from Europe, Caucasus and Central Asia

Due to the lack of a healthy financial system, a significant portion of trade has been conducted through inefficient cash transfers or barter.[28] Overall, as a result of these initiatives, the countries in the region have made some modest gains in regional economic cooperation. However, there has also been a growing realization that trade in Eurasia is shifting more towards the continental level rather than within the region.[29]

Afghanistan and Regional Economic Cooperation

Interestingly, Afghanistan is emerging as an important player in regional economic cooperation. All international and regional players have appreciated Afghanistan's approach towards regional economic cooperation. This has major implications for India's linkages with Central Asia in the long run. Afghanistan's approach coincides with the fact that regional economic cooperation also is becoming an integral part of the globalization strategies of all

[28] See Chapter 3, *Central Asia Human Development Report* (UNDP, 2005).

[29] See Nicklas Norling & Niklas Swanström, 'The Virtues and Potential Gains of Continental Trade in Eurasia', *Asian Survey*, Vol. 47 No. 3, 2007.

the neighboring countries of Afghanistan (including Pakistan and the CAR). Policymakers in Afghanistan believe that after decades of war the country now has a unique opportunity to realize its potential as a 'land bridge' between Central Asia, South Asia and the West Asian region. They also advocate that peace and stability in this strategically important country will provide huge economic opportunities, not only to Afghanistan but also to its neighbors. It is increasingly pointed out that with enhanced cooperation, land-locked energy-rich Central Asia could be connected to energy deficient South Asia. Similarly, Afghanistan could also acquire significant revenue through transit fees and improve its economic activities in the process.§

Most official declarations indicate that Afghanistan is seriously committed to regional cooperation. It intends to share the benefits of its centrality through regional cooperation with its neighbors and countries beyond the immediate neighborhood. Two major documents, *The Afghanistan Compact* and *Afghanistan National Development Strategy,* clearly show that regional economic cooperation is one of the main priorities of the government. Despite difficult conditions and limited capacities, the Afghan government has been able to market itself as an important player in regional cooperation. This is evident through various international declarations, such as the Good Neighborly Relations Declaration of 2002, the Dubai Declaration of 2003, the Berlin Agreements of 2003, the Bishkek Conference of 2004, the Kabul Conference declaration of 2005 and the Delhi Conference declaration of 2006. Through these initiatives, countries in the region have recognized the centrality of Afghanistan for economic cooperation.

Afghanistan has requested accession to the WTO and in December, 2004, the General Council of the WTO established a working group to examine the request. To the WTO's General Council Afghan Ambassador Assad Omer wrote that Afghanistan "hoped to re-establish itself as the land bridge for trans-continental trade." Apart from the WTO, the country is also simultaneously engaged with many of its neighbors through bilateral and multilateral trade, economic, and investment agreements. Afghanistan is an active member of the Economic Cooperation Organization (ECO.). At the fourteenth SAARC summit that was held in Delhi in April, 2007, Afghanistan became the eighth member of that group. Afghanistan's membership in the

SAARC has the potential to bring new dynamism to economic relations between the South Asian and Central Asian regions. Afghanistan also serves in the Contact Group of the SCO. Through its membership in CAREC, CSATTF and the UN Special Program for the Economies of Central Asia (SPECA) Afghanistan is also trying to involve itself with various regional projects and activities associated with enhanced regional cooperation. Officially, it is claimed that 'through regional cooperation Afghanistan seeks to (a) improve trading opportunities; (b) integrate itself with the regional rail and road networks; (c) be an important partner in regional energy markets; (d) eliminate the narcotics trade; and (e) achieve Millennium Development Goals.[30] The following table highlights the trade and transit agreements signed by Afghanistan in the last few years.

[30] For details see regional cooperation section of the Afghanistan Ministry of Foreign Affairs website http://www.mfa.gov.af/regional-cooperation.asp

Table 13: Trade & Transit Agreements by Afghanistan Since 2003

Partner Country	Type of Agreement	Year of Signing	Remarks/ signatory from Afghanistan
ECO Trade Agreement (Regional)	Trade	2003	
SAFTA (Regional)	FTA	AFG entered SAARC on April 1, 2007	The government in the process of completing formalities to be part of SAFTA (negative list etc has been submitted)
Tajikistan	Commercial	2004	Minister of Commerce
India	Trade (PTA)	2003	Minister of Commerce
Turkey	Investment	2004	Minister of Commerce
Turkey	Commercial	2004	Minister of Commerce
Iran, Chabahar	Trade , Transit	2004	DG, ACCI
Iran, Chabahar	Trade, Transit	2004	Minister of Commerce
Multilateral (Iran, Tajikistan)	International Transportation	2004	President
Iran	Trade & Economic Coop MOU	2004	Minister of Commerce
Iran	Int'l transportation	2003	Minister of Commerce
Multilateral (Iran, India)	Chabahar Transit, Delaram Zarang issues	2003	Minister of Commerce
Multilateral (Iran, India)	MOU Multilateral Commission	2003	Minister of Commerce
Iran	Commercial	2003	Minister of Commerce
Multilateral (Iran, Uzbekistan)	Int'l transportation	2005	
Kazakhstan	Trade & Eco coop	2005	Minister of Commerce
Uzbekistan	Trade & Eco coop	2003	Minister of Commerce
Uzbekistan	Transport	2003	Minister of Foreign Affairs
Uzbekistan	Transit & Trade	2004	Minister of Foreign Affairs
Turkey	Customs, transport	2005	Minister of Commerce
Turkmenistan	Trade & Economic Cooperation, Transit	2007	Minister of Foreign Affairs

Source: Afghanistan Ministry of Commerce & Industry & Press Reports

To publicize the concept of Afghanistan's centrality and to identify some regional projects, Afghanistan initiated an institutional mechanism called the Regional Economic Cooperation Conference (RECC) in 2005. The first RECC was held in Kabul on December 4-5, 2005. Organized at the initiative of the UK, the G-8 Chair at the time, the Kabul Conference brought together eleven regional countries, namely China, India, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkey, Turkmenistan, the UAE and Uzbekistan and G-8 representatives, along with officials from the World Bank, Asian Development Bank, IMF, ECO, SCO, etc. The focus of the initiative was to promote specific forms of economic cooperation in areas of critical concern to the regional countries. These included specific sectors such as trade, investment and transport facilitation, electricity trade, and energy development. At the end, an ambitious Kabul Declaration was adopted that incorporated decisions on areas that were identified as potential areas of cooperation. These included (a) electricity trade and power development; (b) sharing the benefits of water; (c) counter-narcotics; (d) transport; (e) energy transport; (f) trade facilitation and (e) business climate.

The second RECC was hosted by India in Delhi in November, 2006. This meeting sought to build on the work done in Kabul in 2005 and followed on the themes identified there. Major topics discussed in Delhi included trade and transport facilitation, investment, regional energy trading and the TAPI gas pipeline. Special attention was also given to energy renewal and agriculture, while concurrent business meetings were held in association with the Afghanistan Investment Support Agency (AISA). At the third RECC, which was held in Islamabad in May, 2009, many issues concerning trade, energy, capacity building, agriculture and counter-narcotics were discussed. Among many other things it was agreed that priority will be given to the following items:

- The conclusion of a Trade and Transit agreement between Afghanistan and Pakistan before the end of 2009.
- A pre-feasibility study of railways across Afghanistan linking major destinations within Afghanistan and its neighbors, to be carried out by the European Commission.

- Establishment of a Customs Academy in Kabul.
- Feasibility studies for the development of border economic zones around Afghanistan.
- An Afghan center within the Ministry of Foreign Affairs to follow up on regional economic cooperation issues by the European Commission.

At the conference it was also agreed that the next RECC will take place in Turkey. Thus, not only have Afghanistan and its neighbors signed agreements b ut there has been significant development in the actual realization of some these of these initiatives.

Infrastructure

Afghanistan has practically no rail or water transport connections. Besides some shipping by air, the country relies mainly on road transport. Until 1980, Afghanistan had 18,000 km of road networks, out of which only 3,000 km was asphalted. As a result of decades of conflict, the road network was completely destroyed. In the last few years the country has started a major program to improve its road network. As per the Road Master Plan, Afghanistan has four types of roads: national highways (3,363 km), regional highways (4,884 km), provincial roads (9,656 km), and rural roads (17,000 km). For regional cooperation, improvement in regional roads is crucially important as they connect Afghanistan with its neighbors. They also connect the neighboring countries with each other. With the help of multilateral agencies and donor countries (mainly USAID, the World Bank, the Asian Development Bank, the European Commission, Japan, Iran, India, and Pakistan) most of these regional roads have been constructed or rehabilitated.

Under this program, the rehabilitation of the ring road has been given priority. This road connects different parts of the country, starting from Kabul and then connecting Mazar-i-Sharif, Faryab, Badghees, Herat, and Kandahar before returning to Kabul. The total length of the road is 2,210 km. By June 2009, it was claimed by the Ministry of Public works that 90 per cent of the ring road project was complete. The remaining 10 per cent was expected to be completed in the next 18 months with additional cost of $300 million. Second, the roads that connect Afghanistan with its neighbors and consequently connect countries in the region include those spanning Kabul-Torkham, Herat-Torghundi, Herat-Islamqala, Kandahar-Spin Boldak, Aquina-Andhkhoy, Delaram-Zeranj and Pule Khumri-Sherkhan Bandar Naibabad. The total length of these roads is 1,153 km, of which 597 km has been rehabilitated so far.

The completion of a significant portion of the national ring road has helped lower transit time through Afghanistan. The opening of the Sher Khan Bandar 'Friendship Bridge' connecting Afghanistan and Tajikistan was another major milestone. This US$ 37 million, 672 meter-long bridge will not only connect two neighboring countries but will also facilitate greater trade and investment flows in the entire region. Plans for connecting Afghanistan with Iran (Herat–Sangan project) and Pakistan (Chaman-Spin Boldak railway) are at different stages of planning and implementation. With the completion of the ring road and further connections with neighbors, Afghanistan can also plan to become a partner in several North-South transport corridors. The improvement of transit facilities through Turkmenistan, Tajikistan and Pakistan and the development of Regional Opportunity Zones (ROZ) on the Afghanistan-Pakistan border have the potential to further integrate the region.

In the area of electricity, Afghanistan is already involved with serious cross-border energy trade. By early 2009, imported power represented about 25–30 percent of Afghanistan's total power supply. Currently, it imports about 100 MW of power from four neighboring countries: Iran, Turkmenistan, Uzbekistan and Tajikistan. Under the North Eastern Power System (NEPS), Afghanistan began in 2009 to import another 300 MW of power from Uzbekistan Similarly, through the Central Asia-South Asia project (CASA-1000), it is expected to import another 1,300 MW of additional power from Tajikistan and Kyrgyzstan by 2012. Out of this, about 300 MW of power will remain in Afghanistan and the remaining 1,000 MW will be exported to Pakistan. Various bilateral electricity trade deals foresee transmission lines from Hairatan on the Uzbekistan border via Pul-e-Khumri to Kabul and then on to Jalalabad and Gardez (original plan) plus lines from Sherkhanbander on the Tajikistan border to Pul-e-Khumri; and from the Turkmenistan border to

Sheberghan, Mazar-i-Sharif, and Pul-e-Khumri. These, together with evolving new multilateral projects such as CASA-1000, could eventually lead to the creation of an integrated Central Asia-South Asia Regional Electricity Market (CASAREM).

India is actively involved in the reconstruction efforts in Afghanistan. The present level of Indian assistance to the country stands at US$ 1.3 billion, making India the fifth largest bilateral donor in Afghanistan, after the U.S., the UK, Japan and Germany. This is a substantial amount for a non-traditional donor like India. India has already completed thirty projects and is involved in fifty further reconstruction projects. These projects are being implemented in the areas of hydro-electricity, power transmission lines, road construction, agriculture, industry, telecommunications, information and broadcasting, education, health and capacity building. Some of the major Indian projects in Afghanistan include:[31]

Major Infrastructure Projects

- Construction of 218 km road from Zaranj to Delaram to facilitate movement of goods and services from Afghanistan to the Iranian border and, onward, to the Chahbahar Port (cost US$150 million. inaugurated in May 2009).
- Construction of 220kV DC transmission line from Pul-e-Khumri to Kabul and a 220/110/20 kV sub-station at Chimtala to bring additional power from the northern grid to Kabul (cost US$ 120 mn. completed in 2009).
- Construction and commissioning of Salma Dam power project (42 MW) on Hari Rud river in Herat province (cost US$ 184 million, to completed by December 2010).
- Construction of the Afghan Parliament (cost US$178 million, to be completed by 2011).

[31] Information on Indian projects in Afghanistan is collected from various sources of the Indian Ministry of External Affairs and information gathered from the Indian embassy in Kabul.

- Setting up of additional 220/20 KV sub stations of Charikar and Doshi along with Pule-e-khumri Kabul transmission line (cost US$23.5 million, completion by 2010-11)
- Emergency restoration of telecommunication infrastructure in 11 provinces (cost US$ 11.1 million, completed in 2005).
- Expansion of national TV network by providing an uplink from Kabul and downlinks in all 34 provincial capitals (completed).
- Supply of vehicles (400 buses and 200 mini-buses for mass urban transportation, 105 utility vehicles for municipalities), cost US$20.3 million, completed between 2004-2006.
- Supply of 3 airbus aircrafts and spares to Ariana Afghan Airlines (cost US$13.7 million, 2003)
- Supply equipment for three sub stations in Faryab province and 125 km transmission line from Andhkhoi to Maimana (cost US$ 8.2 million, 2005).
- Rehabilitation of Amir Ghazi, quargah Reservoir Dam (cost US$ 4.3 million, 2006)
- Restoration/revamping of information set up, including setting up of printing press (Azadi press), 100KW-SW Transmitter (at Yakatoot, Kabul), TV satellite uplinking/downlinking facilty for 10 TV stations, setting up downlinking facility and TV transmitters in 24 provinces (cost US$ 6.8 million, 2006)
- Solar Electrification of 100 villages (2007); construction of 5000MT cold storage in Kandahar (2006); Establishment of modern TV studio, a 1000W TV transmitter in Jalalabad, setting up of a mobile TV satellite uplink and five TV relay centres in Nangarhar (2006); Digging 26 tubewells in 6 north-west provinces (2007); Drilling of 24 deep wells in Heart (2003); Construction of Radio television afgahnsiatn (RTA) building in Jalalabad (2010); and leasing of slot on Indian satellite INSAT3A for RTA telecast since 2004 (Total cost of these project is about US$ 12.5 million)

Humanitarian Assistance

- Daily supply of 100 grams of fortified, high-protein biscuits to nearly 1.2 million children under a School Feeding Programme administered through the World Food Programme (cost US$ 460 million, completion date 2012).
- Gift of 250,000 metric tonnes of wheat, announced in January 2009 (to be supplied when transportation arrangement are finalized by Afghanistan)
- Free medical consultation and medicines through 5 Indian Medical Missions (Kabul, Kandahar, Jalalabad, Heart and Mazar-e- Shrif to over 300,000 patients annually (Total cost till 2012 is about US$ 17.2 million).
- Reconstruction of Indira Gandhi Institute of Child Health in Kabul (cost US$ 6.7 million, 2006).
- Other supplies like blankets, tents, medicines, vegetable seeds etc (cost 2.7 million, 2002-2004)

Education and Capacity Development

- 675 annual long-term university scholarships sponsored by the Indian Council for Cultural Relations for under-graduate and postgraduate studies for Afghan students in India (cost US$ 5.08 million per year till 2014)
- 675 annual slots for short term technical training courses in India (cost US$ 3.4 million annually for 2006-2011.)
- 200 graduate and 100 post graduate/Ph.D fellowships for 5 years in the field of agriculture and related fields (announced at London Conference, 2010).
- Reconstruction of Habibia School, Kabul (cost US$ 5.1 million, 2005).
- Provision of 8646 educational kits to students of Habibia School , laboratory equipments and sports goods to schools in Nimroz; Books to Kandahar and Khost Universities and teachers training (cost US$ 5.1 million, 2005)
- Deputation of 30 Indian civil servants as coaches and mentors under Capacity for Afghan Public Administration (CAP) programme supported

by UNDP and the Governments of Afghanistan and India annually (cost US$ 3.2 million, 2007-09).

- Provision of services of Indian banking experts to Da Afghan Bank and Millie Bank (cost US$ 1.8 million, 2007); Indian English teachers in 5 cities (cost US$ 1.5 million); Vocational Training to 1000 Afghan by the Confederation of Indian Industries (cost US$ 1.4 million, 2008-09); Women's Vocational Training Centre in Baghe- Zanana for training of 1000 Afghan women (cost US$ 1.8 million, 2008-09); establishment of Hindi and English departments at Nangarhar university (US$ 1 million, 2009-10); Supply of 20,000 school desks to Ministry of education; Computer training Centers (US$ 1.4 million, 2004-05).
- Special training courses for Afghan officials: More than 100 officials trained at Foreign Service Institute of India (2002-06); 30 staff of National Assembly at Bureau of Parliamentary Studies and Training (2005); about 300 Afghan police (2002-05); teachers training (about 60); about 60 doctors and paramedics; 60 Ariana Airlines officials; 40 officials from Ministry of mining and industry (2003-04)

Small and Community-based Development Projects

- Around 100 small development projects (agriculture, public health, rural development, education) are under different stages of implementation in 19 provinces of Afghanistan (cost US$ 20 million, 2007-10)

Other Contributions/Projects

- Contribution to Afghan Government Budget (US$ 10 million, 2002).
- Annual Contribution to Afghan Reconstruction Trust Fund (US$ 1.8 million since 2002)
- Contribution to UNDP ELECT Fund (US$ 1 million, 2009).
- Provision of items to Afghan National Army (150 trucks, 15 ambulances, 120 jeeps, bullet proof jackets, bullet proof helmets, laser aim points, mine detectors, winter clothing, medicines etc.) cost US$ 13 million, 2005-06
- Setting up of Common Facilities Service Centre and tool Room at pule-e-Charkhi Industrial Park (cost US$ 3 million, 2006)

- Restoration of Stor Palace, Ministry of Foreign Affairs, Kabul (cost US$ 2 million, survey completed)
- Setting up of 5 toilet complexes in Kabul (cost 0.9 million, 2007).
- Multidisciplinary projects in Nangarhar to wean away poppy cultivators (cost US$ 1.6 ,illion)
- Training of 5000 self help groups in Balkh (cost 0.8 million, 2008-09)
- Assistance in restoration of House of Screens in Murad Khane in old Kabul city (cost 0.2 million)

Indian Design

It is evident from the preceding analysis that most of the regional initiatives in Central Asia are either groping to recreate lost linkages among the former Soviet republics or are initiatives by multilateral organizations to strengthen regional linkages in the areas of trade, energy, water resources, infrastructure and communications. These are largely within the former Soviet space. Other countries such as China, Japan, Iran, Turkey and Pakistan have also been able to create some formal structures for closer interactions, some of which may become useful in the long run. India's involvement through the SCO, CSATTF and SAARC remains limited.

Lacking direct access to the GCA region and with its difficult relations with Pakistan, India's major initiative has been cooperation in building a North-South trade corridor. Russia, Iran and India are founding members of the International North South Transport Corridor (INSTC). Many other countries,, including Belarus, Kazakhstan, Tajikistan, Oman, Armenia, Azerbaijan, Syria, Bulgaria, Ukraine, Turkey, and Kyrgyzstan, have joined the project. This corridor establishes a transit link for the European countries and Russia to the Indian Ocean, Persian Gulf and Southeast Asian states. This is a trade connection for goods in transit between European countries and northern Europe, the Scandinavian region and Russia through the ports of Amsterdam, Hamburg, Copenhagen, Stockholm and Helsinki in Europe to St. Petersburg and Moscow in Russia. It can also extend to the southern ports of the Caspian Sea (Anzali and Amirabad) and to Central Asia through Russian ports on the north of the Caspian Sea and can continue to Iran, the Persian Gulf, and Indian Ocean countries to Southeast Asia. There is also a land connection through Azerbaijan between Russia and Iran. Compared to the long and costly existing sea transport routes, this route with its important section passing through Iranian territory is faster and cheaper than the other routes, such as the Suez Canal. The route links the Indian Ocean (Mumbai port) with Bandar Abbas in southern Iran through maritime transport. Goods will be shipped from Bandar Abbas to northern Iranian ports on Caspian Sea (Bandar Anzali and Bandar Amirabad) through roads and railway and then will be dispatched to Astrakhan and Lagan ports in Russia.[32]

The main transport projects being undertaken under this program with Indian involvement in the GCA region is the development of new port complexes at Chahbahar on the Iranian coast, from where a road leads north to the border with Afghanistan. India has also completed the construction a 235 km link from Zaranj on the Iran-Afghan border to Delaram, which in gturn connects with all major cities in Afghanistan and, further north, the Central Asian republics. India is also building the Afghan portion of the 22 km Zaranj- Milak road. Another road transport project involves the linking of the Chahbahar port to the Iranian rail network, which is connected to Central Asia and Europe (Figure 5).[33] When materialized, this initiative will speed the flow of goods, especially energy, from Greater Central Asia to Iran to India. The Iranian government is also planning to declare the Chahbahar port as a free trade zone and improve its logistical infrastructure.[34]

As discussed above, continental trade is more important for India than trade with only the GCA region. For this reason, any plan tp link India with Europe through the GCA region will be more valuable than any regional or subregional initiative. In this context, the plans of a Trans-Asian highway are very valuable to India. All the GCA countries, along with India and Pakistan, are members of the Asian highway project. This initiative, which is being implemented under the auspices of ESCAP, is a network of 141,000 kilo-

[32] For details about the INSTC see www.instc.org

[33] For details, see *Report on the Economic Impact of Central-South Asian Road Corridors* (ADB, 2005); C. Raja Mohan, 'India, Iran Unveil Road Diplomacy', *The Hindu*, 26 January 2003; Sudha Ramachandran, 'India, Iran, Russia Map out Trade Route', *The Asia Times*, 29 June 2002, and Stephan Blank, The India-Iranian Connection and its Importance for Central Asia, Eurasianet.org, 3/12/03

[34] http://www.iran-daily.com/1387/3339/html/economy.htm#s363078

meters of roads crisscrossing 32 Asian nations with linkages to Europe. The idea was conceived in 1959 and was revitalized in 1992, but the current project was enforced only in July, 2005. In the project, India, Pakistan and Afghanistan cover 11,432 km, 5,377 km and 4,247 km respectively. Similarly, 13,189 km of roads falls in Kazakhstan and 2,966 km in Uzbekistan. Turkmenistan, Tajikistan and Kyrgyzstan cover 2,204 km, 1,925 km and 1,059 km respectively. Afghanistan, Pakistan and Kazakhstan have more kilometers of roads below Asian Highway standards (800-3,250 km) and are therefore priority countries for the project.

Similarly, the countries of the region are involved in another UNESCAP project called the Trans-Asian Railway. Most countries in the region are linked through different corridors of the project. The first plans of this project were discussed in the 1960s, but political and technical problems repeatedly prevented the linking of railway networks. Under the auspices of the UNESCAP in 2006, 17 nations agreed on this 81,000 km trans-continental network to link Europe and Asia. This network initially was to provide connectivity to 28 nations, with a few more joining later. The Transport Corridor Europe-Caucasus-Asia (TRACECA) is another program in which all the Central Asian republics are involved. The European Commission, along with the governments in the region, formulated this 14-nation program in 1993. The corridor starts in Eastern Europe and crosses Turkey. Through Central Asia, it reaches China and Afghanistan. In the past few years, new roads and railways have been built along the corridor.

It is now understood that the plethora of regional organizations may actually become a problem for the GCA as limited official capacities in the region are being tied up in order to participate in this plethora of activities. *The World Development Report 2008* argues that this "illustrates the problems that can arise from a disjointed regional approach.". It warns that "regional initiatives in Central Asia can foster integration but add duplication and complexity to reform." It further maintains that the ongoing 'WTO accession for many of these countries could help, because the WTO has clear rules on regional trade agreements. Also needed are trade and transport facilitation initiatives and behind-the-border reforms to improve the countries' attractiveness to

FDI and bolster their global integration.'[35] Thus, internal reforms in the region and the merging of some of the existing organizations would go far towards paving the way for meaningful integration of the Central and South Asian regions.

Past experience in both the Central and South Asian regions also shows that these regions will not be able to realize the huge economic potentials from economic cooperation unless all the regional and extra-regional players begin to cooperate. What is needed for meaningful economic cooperation between Central and South Asia? A regional economic initiative consisting of all the countries of Greater Central Asia, as well as well as China, India, Iran, Japan, Russia, Pakistan, Turkey and the United States. This is somewhat similar to Frederick Starr's concept of a "Greater Central Asia Partnership for Cooperation and Development"[36] with some additional countries included. It is only through such a joint endeavor by all of these countries that regional economic cooperation is going to be truly successful. Pakistan and India, for example, have a common interest in unlocking the energy resources of the region to their advantage.

Unless the GCA countries open up politically and economically and ultimately become members of the WTO, there is going to be very limited regional economic cooperation in the short to medium term. In the meanwhile, India will concentrate more on Afghanistan and Kazakhstan for energy and trade cooperation. From an Indian perspective, an extension of SAFTA to Central Asia would be useful. Afghanistan is already a member, and Iran and China have been given observer status in the organization. Tajikistan, Uzbekistan and Kazakhstan should also be encouraged to become associated in the grouping.

For India, these all remain separate pieces of a much larger picture, which is basically the development of new India-Europe linkages through Greater Centfral Asia. In fact, the SAARC multi–model transport linkages, the CAREC action plans, CSATTF and INSTC are already-existing bits and pieces

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[35] World Development Report 2008.

[36] S. Frederick Starr, 'A Partnership for Central Asia', *Foreign Affairs*, Vol. 84, No.4, 2005 and S. Frederick Starr, ' *A Greater Central Asia Partnership for Afghanistan and Its Neighbors*', (Washington, D.C: Central Asia-Caucasus Institute & Silk Road Studies Program, 2005).

of the Trans-Asian highway and Trans-Asian railway plan (see Figures 4 to 7 in Appendix). If India-Pakistan relations improve, it could be linked through Pakistan and Afghanistan, which will be useful, particularly for the north Indian states. Some parts of India will be linked with the plan through the Mumbai port and INSTC, which is already becoming an important component of the Trans-Asian railway network. Further synergies through SAARC, CAREC and CSATTF will improve its effectiveness and scope. If, however, relations between India and Pakistan and between Pakistan and Afghanistan do not improve, then important parts of South Asia will miss out on the stunning economic opportunities that these grand initiatives can create.

Linking India and GCA through an Air Corridor

Air connections between GCA countries and India provide vivid testimony to the business opportunities that arise when South Asian markets are linked to Europe through Central Asia. Air transportation is going to play an extremely important role for greater regional integration in the coming years. Since the development of road and rail corridors are going to take time (due to heavy investments and other political/security problems), reliable air services at reasonable rates could bring significant benefit to the GCA region. Since air traffic in and out of Central Asia may not be sufficient to sustain daily reliable services at economical rates, the region has to be linked into the main traffic routes. There are already more than 29 direct weekly flights from India to all the important destinations in Greater Central Asia (see Table 20). These flights are operated as low-cost carriers mostly by Central Asian airlines to and from Delhi and Amritsar to Europe via such Central Asian cities as Tashkent and Ashgabat. Once airlines from Afghanistan are able to establish their European connections, they will also follow the same route. In this way, Delhi could become a center of air corridors for the entire region. This is quite possible since major modernization programs at Indian airports are already underway. Indeed, by 2011 the Indian government will have modernized four metropolitan and thirty-five non-metropolitan airports. Delhi and Mumbai airports will become world-class airports by the end of 2010.

Table 14: India-Greater Central Asia Direct Air Connections

Airlines	**Route**	**Flights Per Week**
Uzbekistan Airways	Delhi-Tashkent	Two
Uzbekistan Airways	Amritsar-Tashkent	Four
Turkmenistan Airlines	Delhi-Ashgabat	Two
Turkmenistan Airlines	Amritsar-Ashgabat	Six
Indian Airlines	Delhi-Kabul	Six
Ariana Airways	Delhi-Kabul	Two
Kam Air	Delhi- Kabul	Three
Air Astana	Delhi-Almaty	Three
Kyrgyzstan Airlines	Delhi- Bishkek	One
Total		**Twenty-nine**

Source: Compiled with information from airline websites and from travel agents.

Conclusions and Policy Recommendations

Due to economic policies initiated in the 1990s, India's excessively inward-oriented economy has become one of the fastest growing economies in the world. As this occurred, its links with other Asian economies have greatly strengthened. Although Asian economies have shown great dynamism in recent decades, a full-fledged Asian economic architecture is still in the process of evolving. India has formalized its economic relations with South and Southeast Asian countries through the establishment of SAFTA, BIMSTEC, India-ASEAN agreement and through bilateral agreement with Sri Lanka, Singapore, Thailand, Afghanistan, Bhutan, Nepal, etc. The same trend is likely to be followed with Japan and later perhaps with China, which has already become India's largest trading partner. These arrangements indicate that in the coming years India will be playing an important role in the evolving Asian economic architecture. India's role in these evolving structures will be further strengthened if its economic relations with its immediate neighbor, Pakistan, and extended neighbors in Central Asia become more dynamic. Given this, it will be important for India to develop an economic strategy that will engage Pakistan, Afghanistan and the Central Asian republics in a way that enables them all to become partners and to benefit from what they understand to be an economic opportunity. The U.S.'s strategic goals of stability in Afghanistan and helping linkages between Central and South Asia mesh with India's involvement in Afghanistan and are fully harmonious with India's desire to improve its presence in Central Asia.

Despite having a very complex legacy, the GCA region has made significant progress in market reforms. In contrast to the earlier period of decline, the economies in this region are now growing briskly. High commodity prices (including gas and oil) and reasonable infrastructure and human capital have helped these economies to push for high growth rates. The momentum of recent growth has also made regional leaders more confident in the possibility of success if they push to advance much-needed economic reforms. As a result of this combination of factors, the regional growth performance has been among the fastest in the world since the late 1990s. Even in Afghanistan, economic growth has been quite remarkable. Yet despite these successes, in some countries the reforms have not been consolidated and the region as a whole is still vulnerable to external shocks.

High economic growth in both Central and South Asia is pushing policy makers to promote strategies of integration. Afghanistan's membership in the SAARC, the implementation of SAFTA, increasing linkages between India and Kazakhstan, and Afghanistan's emergence as an important player in facilitating regional economic cooperation are all giving substance to India's newly emerging 'Look-West' policy. This will be further strengthened with the signing of India-GCC FTA and positive developments on TAPI and/or IPI. With a $1.2 billion commitment, India is already playing a very constructive role in the reconstruction efforts of Afghanistan. With some positive political developments in the region, there is a vast scope for an expanded Indian role in Afghanistan. Yet a serious caution is in order. The new U.S. administration has downsized its goals and expectations in Afghanistan, leaving the length and character of its commitment in question. Washington's new reductionist strategy in Afghanistan may frustrate some of the efforts for establishing Greater Central Asia as a major economic zone with Afghanistan at its heart.

India's current trade with the Central Asian region is very small and likely to remain modest in the coming years. However, the importance of the GCA region for Indian trade should not be seen only in the context of the modest regional trade. By 2015, India's trade with Europe, the CIS plus Iran, Afghanistan and Pakistan would be in the range of US$ 500 to $ 600 billion annually. Even if 20 % of this trade were conducted through road, US$ 100-120 billion of Indian trade would be passing through the GCA region. By denying access to its territory to India, Pakistan might have thought that it will become a significant player in Central Asia and will have harmed Indian trading interests. However, Pakistan's exports to Central Asia are only $10 to 15 million every year. In the processes, it is losing tens of billions of transit trade, which might have transformed its infrastructure, created thousands of jobs and benefits in forward and backward linkages. At the moment, both India and Pakistan are marginal economic players in Central Asia. In cooperation with each other, both can become significant, if not dominant players in the region. Recent developments indicate that India is finally entering the region in the areas of oil and gas, textiles and nuclear trade, all of which are key areas for Central Asia. Indeed, if Mittal Steel is considered 'Indian,' then India has already become a dominant player in iron and steel.

The GCA region is involved in a number of regional initiatives. Many of them remain only on paper and the uncontrolled proliferation of regional organizations could actually become a problem in the coming years through duplication amd poor coordination among them. However, it appears that SAARC, SCO and CAREC will continue to be important in the coming years. Past experience in both the Central and the South Asian regions also shows that these regions will not be able to realize the huge economic potentials from economic cooperation unless all the regional and extra-regional players start collaborating. For a meaningful cooperation between both the regions, a regional economic initiative is needed consisting of all GCA countries, China, India, Iran, Japan, Russia, Pakistan, Turkey and the United States. It is only by the joint endeavor of all these countries that regional economic cooperation can be truly successful. Unless all these players are accommodated, suspicions and tensions will continue. All the important players in the region have good relations with India. It has 'strategic partnership' agreements with the US, Russia and China and has good relations with the GCA countries and Iran. In cooperation with all these countries, India could work seriously for an 'informal network' of all these players. Ideally, the nucleus of this new network could be Afghanistan, through which Central Asia, South Asia, China and Iran meet. It could be created through the existing institution of the RECC on Afghanistan.

Compared to the existing modest levels of trade between South and Central Asia, continental trade is going to be much more important for India. As a result, plans for linking India with Europe through the GCA region will be much more valuable rather than thinking in a regional or sub-regional context. UNESCAP plans of an Asian highway fit well within the Indian framework. Different infrastructural plans such as the SAARC multi-model transport linkages, CAREC action plans, CSATTF and INSTC are all different pieces of this grand design. Ultimately, Indian trade volumes will reach Europe through these different schemes. INTEC is already becoming an important component of the Trans- Asian railway network. Further synergies through SAARC, CAREC and CSATTF will improve its effectiveness and scope. With improvement in India-Pakistan relations, an important portion of Indian trade (particularly from the landlocked northern states, including Jammu & Kashmir) will move through Pakistan and Afghanistan. With the possibility of this trade passing through GCA, most of the infrastructural projects in the region will become economically viable. The development of this infrastructure will create further incentives for regional and sub-regional cooperation. These linkages will also transform small and medium industries and agriculture in Central Asia, thanks to Indian and Pakistani expertise in these fields. Once that happens, SAFTA could be extended to Central Asia as well as to Iran.

Overall, India can look at the Greater Central Asia region afresh within the following framework:

- At this point in history, both the Central and South Asian regions are two of the fastest growing regions of the world.
- India's role in an evolving Asian economic architecture will be further strengthened when its economic relations with its immediate neighbor, Pakistan, and with its extended neighbors in Central Asia become more dynamic.
- The importance of the GCA region for Indian trade should not be seen only in the context of very small regional trade.

- By 2015, India's trade with Europe, the CIS plus Iran, Afghanistan and Pakistan would be in the range of US$ 500 to 600 billion annually.
- Even if 20 percent of this trade is conducted through road, US$ 100-120 billion of Indian trade would pass through the GCA region.
- Compared to modest regional trade in GCA, continental trade will be much more important for India. Therefore, plans for linking India with Europe through GCA will be much more valuable than schemes mounted on a regional or sub-regional context.
- Asian highway projects fit India's framework well. Since different infrastructural plans by SAARC, CAREC, CSATTF, and INSTC are all parts of this bigger design, their individual success is also crucial.
- If one part of the bigger design does not work, it can be compensated with another scheme. Due to difficulties in India-Pakistan relations, this was the thinking behind INSTC. It can increase the short-term costs but longer-term targets could still be achieved.
- Pakistan's denial of access of its territory to Indian goods might have harmed Indian trading interests in Central Asia. Nonetheless, Pakistan has not been able to send any significant exports to the region either. Therefore, Indian goods in Central Asia cannot be imported at the expense of Pakistani products.
- With improvement in India-Pakistan relations, an important portion of Indian continental trade (particularly from its northern territories) will move through Pakistan and Afghanistan. This will improve the economic viability of many infrastructural projects in GCA and Pakistan. Many backward and forward linkages will also be created.
- An Indian-Pakistan partnership will also transform small and medium industries and agriculture in the entire GCA region, including Afghanistan.
- With these developments, SAFTA's extension to Central Asia and Iran could also become a reality.

Overall, the cost of the poor relations between India and Pakistan is far greater for both countries than is indicated by the usual estimates based solely on foregone bilateral trade.

Appendix

Table A1: Commodity Composition of Indian Trade with Greater Central Asia 2006-07 & 2007-08 (In US$ millions, only those commodities are listed where trade is more than 0.5 million in any particular year)

Exports to Afghanistan	2006-7	2007-08
Aluminum and articles thereof.	9.32	1.58
Articles of apparel and clothing accessories, knitted or corcheted.	0.90	2.66
Articles of apparel and clothing accessories, not knitted or crocheted.	19.60	11.52
Articles of iron or steel	10.99	5.37
Cotton.	4.04	3.55
Dairy produce; birds' eggs; natural honey; edible prod. of animal origin	2.68	16.03
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts.	6.63	16.69
Essential oils and resinoids; perfumery, cosmetic or toilet preparations.	1.10	1.27
Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishing; lamps and lighting fittings	0.57	0.05
Headgear and parts thereof.	4.09	0.65
Iron and steel products	6.79	7.84
Lac; gums, resins and other vegetable saps and extracts.	0.49	0.51
Machinery and mechanical appliances (central heating boilers, pumps, sewing machines, farm machinery etc.)	5.75	5.07
Man-made filaments.	22.53	66.91
Man-made staple fibres.	6.31	6.65
Meat and edible meat offal.	4.87	5.35
Miscellaneous edible preparations.	0.23	0.89
Miscellaneous goods.	0.16	0.91
Natural or cultured pearls, precious or semiprecious stones, imitation jewellery etc	1.45	1.34
Optical, photographic cinematographic measuring, checking precision, medical or surgical inst. And apparatus parts and accessories thereof;	0.92	0.63
Organic chemicals	0.71	2.10
Other made up textile articles; furnishing items, blankets etc	1.09	1.62

Pharmaceutical products	42.81	41.73
Plastic and articles thereof.	0.92	0.52
Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans.	2.00	1.36
Rubber and articles thereof.	2.73	4.69
Sugars and sugar confectionery.	1.52	18.80
Tea	1.94	3.87
Tobacco and manufactured tobacco substitutes.	9.66	10.27
Tools implements, cutlery, spoons and forks, of base metal; parts thereof of base metal.	2.11	1.69
Vehicles (tractors, public transport vehicles, etc) and parts and accessories thereof.	3.30	3.87
Total	**181.58**	**248.86**

Imports from Afghanistan	**2006-07**	**2007-08**
Asafetida	15.02	26.62
Edible fruits (fresh & dried grapes, melons, apricots, pomegranates. etc): and nuts (almonds, pistachios, figs etc)	15.44	78.91
Seeds of anise, badian, fennel, coriander, cumin, caraway or juniper	3.26	2.29
Total	**34.48**	**109.23**

Exports to Kazakhstan		
Tea	8.95	13.31
Miscellaneous edible preparations.	0.45	0.52
Tobacco and manufactured tobacco substitutes.	0.47	0.53
Organic chemicals	1.01	0.91
Pharmaceutical products	25.40	27.48
Miscellaneous chemical products.	0.55	0.48
Plastic and articles thereof.	0.57	0.26
Rubber and articles thereof.	1.10	2.62
Articles of leather, saddlery and harness, travel goods, handbags and similar cont. articles of animal gut(other than silk-warm)gut.	6.08	3.47
Articles of apparel and clothing accessories, knitted or corcheted.	6.50	14.62
Articles of apparel and clothing accessories, not knitted or crocheted.	1.96	2.71
Other made up textile articles including furnishing articles	0.48	1.36
Articles of stone, plaster, cement, asbestos, mica or similar materials.	0.17	0.79

Ceramic products.	2.72	2.09
Iron and steel (Flat rolled products)	2.93	1.32
Articles of iron or steel	1.55	0.75
Aluminum and articles thereof.	2.41	23.55
Machinery and mechanical appliances (metal rolling mills, laboratory equipment etc.) and parts thereof.	10.56	5.82
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers,and parts.	6.29	3.99
Vehicles and parts and accessories thereof.	0.67	0.33
Total	**83.27**	**111.86**

Imports from Kazakhstan	**2006-07**	**2007-08**
Cereals (wheat and meslin)	7.42	
Inorganic chemicals(chromium oxides and hydroxides, alkali etc.)	0.23	0.95
Iron and steel (Ferro Alloys, flat rolled products etc)	15.95	17.21
Unwrought lead, lead waste and scrap		3.08
Raw hides and skins (other than fur skins) and leather	0.51	0.57
Asbestos and sulphur;	11.90	10.05
Unwrought zinc	51.23	43.49
Total	**88.13**	**76.79**

Exports to Kyrgyzstan	**2006-07**	**2007-08**
Articles of apparel and clothing accessories, knitted or corcheted.	17.93	15.95
Articles of apparel and clothing accessories, not knitted or crocheted.	9.47	5.64
Coffee, tea, mate and spices.	0.49	0.56
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers,and parts.	2.11	0.35
Machinery and mechanical appliances (printing machinery, automatic data processing machines etc); parts thereof.	1.04	0.63
Pharmaceutical products	3.79	2.88
Leather articles (suit cases, traveling bags etc)	0.32	3.33
Total	**37.21**	**31.56**

Note: No Import From Kyrgyzstan Was More Than 0.5 mn these years

Exports to Tajikistan	2006-07	2007-08
Articles of apparel and clothing accessories, knitted or corcheted.	1.87	0.87
Bird eggs, in shell, fresh PRSVD or CKD	0.03	0.60
Iron and steel		0.90
Meat of bovine animals frozen	1.39	4.53
Pharmaceutical products	2.09	3.76
Total	**7.45**	**12.41**

Imports from Tajikistan	2006-07	2007-08
Unwrought aluminum	4.11	8.41
Cotton (not carded or combed)	3.93	1.23
Total	**8.05**	**9.69**

Exports to Turkmenistan	2006-07	2007-08
Articles of apparel and clothing accessories, not knitted or crocheted.	6.99	5.77
Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers,and parts.	13.97	10.61
Meat of bovine animals frozen	2.45	1.47
Machinery and mechanical appliances (pumps, refrigeration and air conditioning machinery etc); parts thereof.	4.01	6.23
Pharmaceutical products	3.74	6.95
Rubber and articles thereof.	0.43	0.75
Sugars and sugar confectionery.	0.00	1.20
Tobacco and manufactured tobacco substitutes.	0.14	0.58
Total	**33.81**	**36.06**
Imports from Turkmenistan	**2006-07**	**2007-08**
Cotton (not carded and combed, yarn)	7.48	4.83
Inorganic chemicals (fluorine chlorine Bromine & Iodine, Carbon etc.)	4.02	3.58
Total	**12.05**	**8.58**

Exports to Uzbekistan	2006-07	2007-08
Meat of bovine animals frozen	1.38	0.84
Sugars and sugar confectionery.	0.52	0.55
Organic chemicals	0.90	1.01
Pharmaceutical products	12.70	21.86

Plastic and articles thereof.	0.50	0.76
Paper and paperboard; articles of paper pulp, of paper or of paperboard.	2.94	1.44
Articles of iron or steel	0.34	0.57
Miscellaneous articles of base metal.	0.93	0.97
Boilers, machinery and mechanical appliances (printing machinery, roller bearings etc); parts thereof.	4.54	7.22
Vehicles (Bicycles etc) and parts and accessories thereof.	0.88	0.80
Optical, photographic cinematographic measuring, checking precision, medical or surgical inst. And apparatus parts and accessories thereof;	0.92	1.44
Total	**29.66**	**40.30**

Import from Uzbekistan	**2006-07**	**2007-08**
Cotton, not carded or combed	0.37	0.67
Dried leguminous veg shld W/N skinned split	1.86	0.35
Synthetic filament tow and synthetic staple fibers	0.55	
Petroleum oils and oil obtained from bituminous substances; mineral waxes.	0.25	0.61
Raw silk (not thrown)	1.69	0.28
Unwrought Zinc	28.77	13.70
Total	**33.85**	**16.07**

Source: Department of Commerce, Ministry of Commerce & Industry, Government of India

Table A2 : EBRD Transition Indicators for Central Asian Republics 1992-2008 (Scale 1 to 4)

		Large priv.	Small scale private-zation	Enterprise restructuring	Price liberali-zation	Trade & Forex system	Competition Policy	Banking reform*	Securities markets **	Overall infrastructure reform	Tele-commun-ications	Railways	Electric power	Roads	Water and waste water
KAZAKHSTAN	1992	1.00	2.00	1.00	2.67	1.00	1.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00
	1995	2.00	3.00	1.00	4.00	3.00	2.00	2.00	1.67	1.00	NA	3.00	1.67	1.00	1.00
	2000	3.00	4.00	2.00	4.00	3.33	2.00	2.33	2.00	2.33	2.33	3.00	2.00	1.67	1.67
	2005	3.00	4.00	2.00	4.00	3.67	2.00	3.00	2.33	2.67	3.00	3.33	2.00	2.00	2.00
	2008	3.00	4.00	2.00	4.00	3.67	2.00	3.00	2.67	3.00	3.00	3.33	2.33	2.00	2.00
KYRGYZ REPUBLIC	1992	2.00	2.00	1.00	2.33	2.00	1.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00
	1995	3.00	4.00	2.00	4.33	4.00	2.00	2.00	1.33	2.00	NA	2.00	1.00	1.00	1.00
	2000	3.00	4.00	2.00	4.33	4.33	2.00	2.00	1.33	2.33	1.00	2.33	1.00	1.00	1.00
	2005	3.67	4.00	2.00	4.33	4.33	2.00	2.33	1.67	3.00	1.00	2.33	1.67	1.67	1.67
	2008	3.67	4.00	2.00	4.33	4.33	2.00	2.33	1.67	3.00	1.00	2.33	1.67	1.67	1.67
TAJIKISTAN	1992	1.00	2.00	1.00	2.67	1.00	1.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00
	1995	2.00	2.00	1.00	3.33	2.00	2.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00
	2000	2.33	3.33	1.67	3.67	3.33	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2005	2.33	4.00	1.67	3.67	3.33	1.67	2.00	1.33	2.33	1.00	1.67	1.00	1.00	1.00
	2008	2.33	4.00	1.67	3.67	3.33	1.67	2.33	1.33	2.33	1.00	2.00	1.00	1.67	1.67
TURKMENISTAN	1992	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00
	1995	1.00	1.67	1.00	2.67	1.00	1.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00
	2000	1.67	2.00	1.00	2.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2005	1.00	2.00	1.00	2.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	2008	1.00	2.33	1.00	2.67	2.00	1.00	1.00	1.00	1.67	1.00	1.00	1.00	1.00	1.00
UZBEKISTAN	1992	1.00	1.00	1.00	2.67	1.00	1.00	1.00	1.00	1.00	NA	1.00	1.00	1.00	1.00
	1995	2.67	3.00	2.00	3.67	2.00	2.00	1.67	1.00	1.00	NA	1.00	1.00	1.00	1.00
	2000	2.67	3.00	1.67	2.67	1.00	2.00	1.67	1.33	2.00	2.33	1.00	1.00	1.00	1.00
	2005	2.67	3.00	1.67	2.67	2.00	1.67	1.67	1.67	2.00	2.67	2.33	1.00	1.67	1.67
	2008	2.67	3.33	1.67	2.67	2.00	1.67	1.67	1.67	2.00	2.67	2.33	1.00	1.67	1.67

* Banking Reform & Interest Rate Liberalization, ** Security markets & non bank financial institutions
Source: EBRD Database

Table A3. Selected Indicators of Economic and Social Reforms in Central Asia, 2008

	LIBERALIZATION AND PRIVATIZATION						BUSINESS ENVIRONMENT AND COMPETITION			
	Current account convertibility	Controls on inward direct investment	Interest rate libera-lization	Exchange rate regime	Wage regulation	Tradability of land	Competition office	Quality of insolvency law	Secured transactions law	Quality of corporate governance law
Kazakhstan	full	yes	full	managed float	no	full except foreigners	Yes	medium	some defects	high
Kyrgyz Rep.	full	no	full	managed float	no	full except foreigners	Yes	medium	some defects	medium
Tajikistan	full	no	full	managed floating	yes	limited de jure	Yes	low	inefficient	very low
Turkmenistan	limited	no	limited de jure	fixed	yes	limited de jure	no	low	malfunctioning	low
Uzbekistan	limited	yes	limited de jure	managed float	yes	limited de jure	Yes	low	malfunctioning	medium

	SOCIAL SECTOR			
	% of population living below poverty	Government expenditure on health (% of GDP)	Government expenditure on education (% of GDP)	Household expenditure on power & water
Kazakhstan	16 % (2004)	2.3 % (2005)	2.3 % (2004)	3.7 %
Kyrgyz Republic	21.3 % (2003)	2.3 % (2004)	4.4 % (2005)	4.4 %
Tajikistan	42.8 % (2003)	1.4 % (2006)	4.2 % (2006)	6.0 %
Turkmenistan	44 % (1998)	2.1 % (2005)	5.4 % (2005)	0.3 %
Uzbekistan	26 % (2003)	2.4 % (2000)	6.2 % (2006)	5.2 %

Source: EBRD Database

Table A4: India GCA trade 1996-97 to 2007-08

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Afghanistan	25.79	31.95	40.93	54.26	52.45	41.89	79.23	185.98	212.44	202.09	216.06	358.09
Kazakhstan	16.96	51.16	50.43	40.65	64.12	53.09	59.61	84.07	96.81	117.16	171.41	188.65
Kyrgyzstan	0.98	10.8	8.81	15.61	22.02	11.52	15.13	38.74	50.19	29.57	37.98	32.47
Tajikistan	1.53	1.12	3.04	4.72	4.10	2.56	8.73	8.42	10.68	12.13	15.50	22.10
Turkmenistan	1.65	1.70	2.03	6.03	3.83	6.30	15.70	28.55	26.12	31.18	45.86	45.64
Uzbekistan	10.74	20.3	14.50	22.91	19.98	23.80	25.62	42.84	52.81	50.57	63.51	56.37
Total GCA	57.65	117.03	119.74	144.18	166.50	139.16	204.02	388.60	488.75	442.70	550.32	703.32
Total Indian Trade	72602	76490	75608	86493	95096	95240	114131	141992	195053	252256	311866	414546
% of Total Indian Trade	0.079	0.153	0.158	0.166	0.175	0.146	0.178	0.273	0.250	0.175	0.176	0.169

(US$ Million) Source: Department of Commerce, Ministry of Commerce & Industry, Government of India

Table A5: Indian Exports to Greater Central Asia, 1996-97 to 2007-08

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	20007-08
Afghanistan	22.74	21.25	12.81	33.20	25.86	24.37	60.77	145.87	165.44	142.67	181.58	248.86
Kazakhstan	4.39	15.13	38.0	27.19	50.08	45.70	46.88	74.81	81.42	90.86	83.27	111.86
Kyrgyzstan	0.98	10.79	8.70	13.80	17.59	10.95	14.67	38.20	49.57	28.09	37.21	31.56
Tajikistan	0.73	1.12	0.51	2.38	3.55	1.22	8.65	4.47	6.59	6.24	7.45	12.41
Turkmenistan	1.38	1.68	1.93	5.64	2.71	4.35	10.29	19.21	15.26	18.83	33.81	36.06
Uzbekistan	8.14	17.59	12.83	9.94	9.39	6.53	5.08	15.14	21.35	24.44	29.66	40.30
Total GCA	38.36	67.56	74.78	91.60	109.19	93.12	146.34	297.70	339.63	311.13	372.98	481.05

(US $ million) Source: Department of Commerce, Ministry of Commerce & Industry, Government of India

Table A6: Indian Imports from Greater Central Asia, 1996-97 to 2007-08

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	20007-08
Afghanistan	3.05	10.70	28.14	21.06	26.59	17.52	18.46	40.51	47.01	58.42	34.48	109.23
Kazakhstan	12.57	36.03	12.43	13.45	14.04	7.39	12.73	9.26	15.39	26.31	88.13	76.79
Kyrgyzstan	--	0.01	0.10	1.82	4.43	0.56	0.47	0.54	0.63	1.47	0.77	0.91
Tajikistan	0.80	--	2.53	2.33	0.54	1.34	0.08	3.95	4.09	5.89	8.05	9.69
Turkmenistan	0.27	0.02	0.11	0.38	1.12	1.95	5.40	9.34	10.87	12.35	12.05	9.58
Uzbekistan	2.60	2.71	1.67	12.97	10.58	17.27	20.54	27.70	31.46	26.13	33.85	16.07
Total GCA	19.29	49.47	44.95	52.02	56.91	46.02	57.68	91.30	109.45	130.75	177.33	222.27

(US$ Million) Source: Department of Commerce, Ministry of Commerce & Industry, Government of India

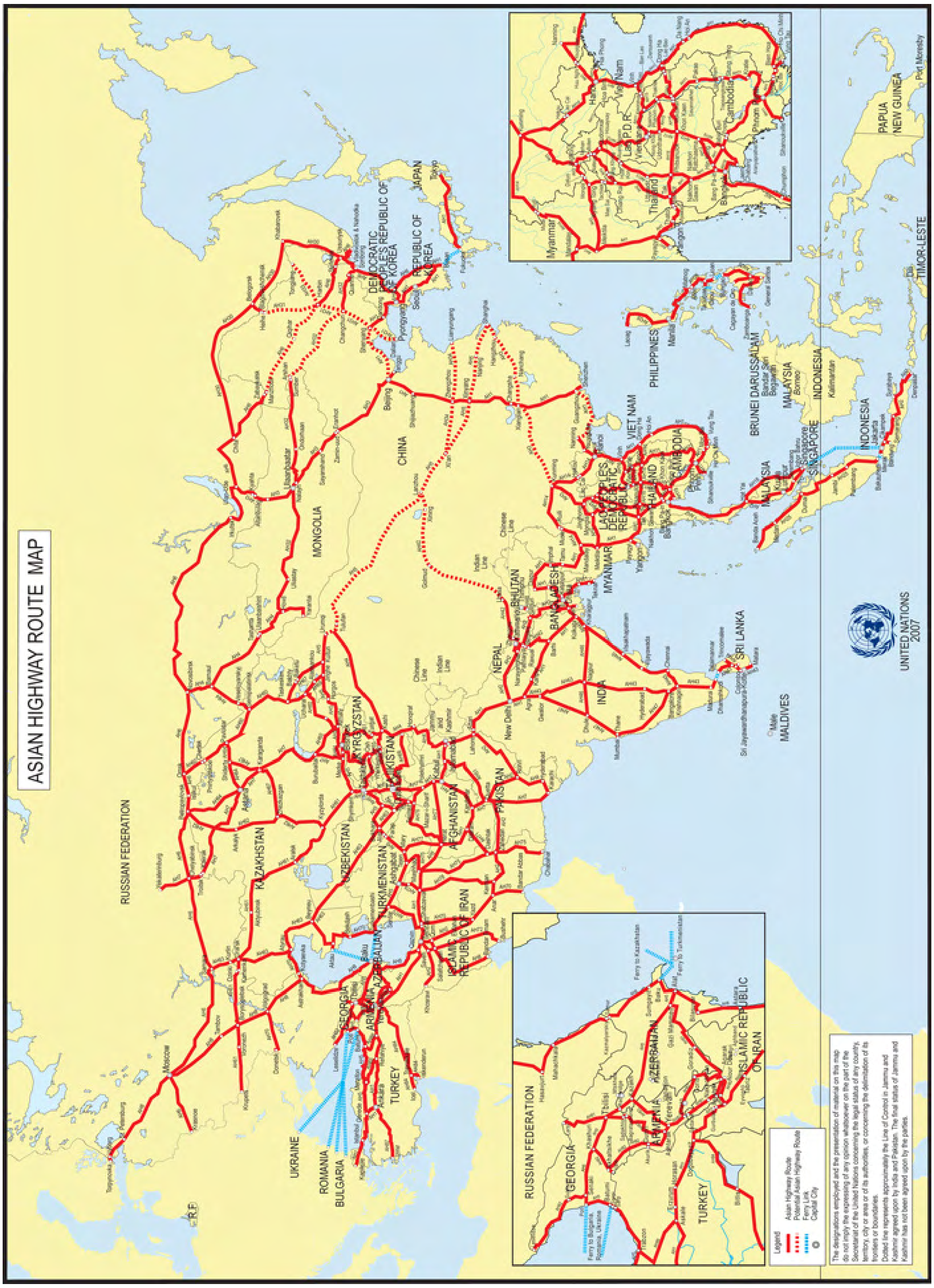
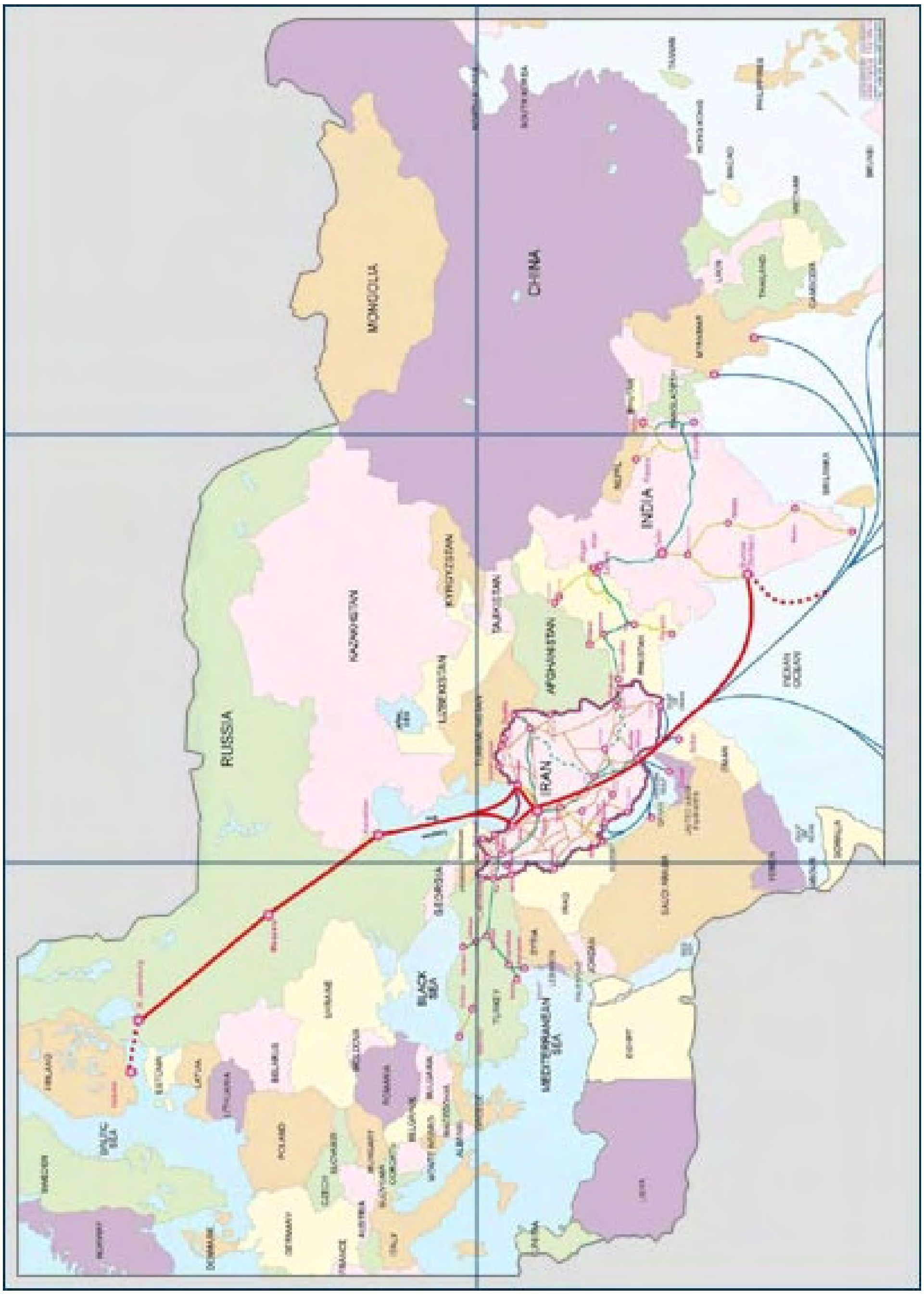


Fig 4: Asian Highway

Figure 5: International North-South Transport



Source: International North South Transport Corridor Secretariat website www.instc.org

Fig 7: Asian Highway Route Maps of India and Pakistan